

VOLUME XCIX

NUMBER TWO

# THE NATIONAL GEOGRAPHIC MAGAZINE

FEBRUARY, 1951

## Yugoslavia, Between East and West

With 28 Illustrations and Map  
20 in Natural Colors

GEORGE W. LONG  
VOLKMAR WENTZEL

## American Processional: History on Canvas

With 38 Illustrations  
33 Paintings

JOHN and BLANCHE LEEPER

## Flags of the United Nations

With 186 Illustrations  
180 Paintings

ELIZABETH W. KING

## Sea Birds of Isla Raza, Baja California

With 15 Illustrations and Map  
10 in Natural Colors

LEWIS WAYNE WALKER

## With the Nuba Hillmen of Kordofan

With 24 Illustrations and Map

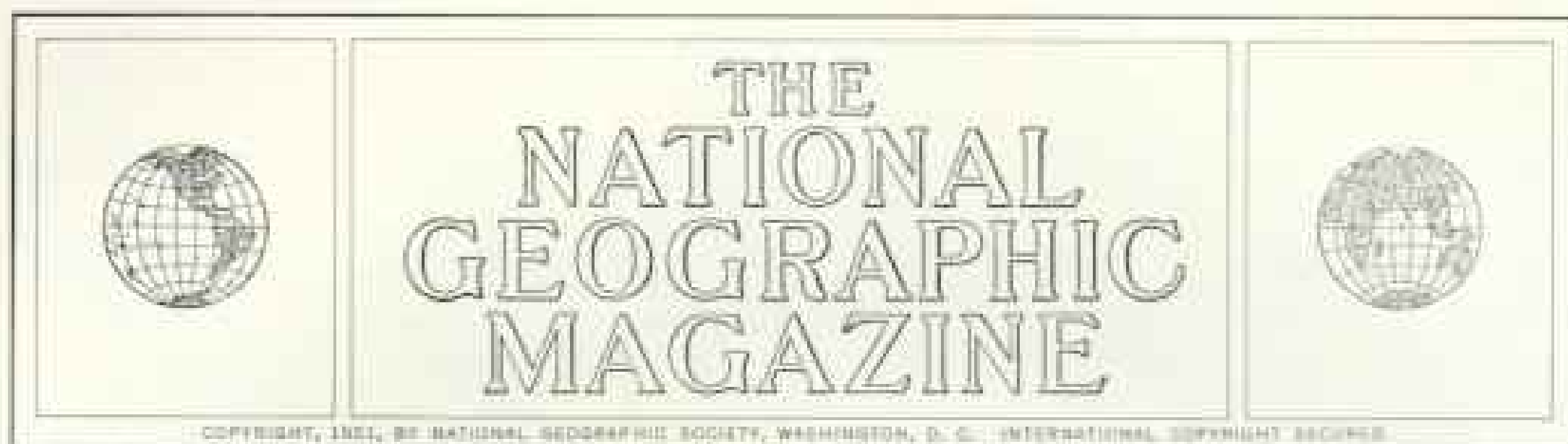
ROBIN STRACHAN  
GEORGE RODGER

Sixty-four Pages of Illustrations in Color

PUBLISHED BY THE  
NATIONAL GEOGRAPHIC SOCIETY  
WASHINGTON, D. C.

\$5.00 A YEAR

50¢ THE COPY



## Yugoslavia, Between East and West

BY GEORGE W. LONG

*With Illustrations by Staff Photographer Volkmar Wentzel*

**I**N THIRTY days and 2,700 miles of travel in Tito's Yugoslavia, I saw a land of hard work, sky-high prices, and hope mingled with some foreboding. This Communist country, expelled by Soviet Russia and its satellites, cannot forget that it has a pistol at its back—and that here, in Sarajevo, an assassin's bullets exploded World War I.

Military areas along satellite frontiers are out of bounds to travelers, but with this exception I found no curtain, iron or otherwise.

"America" was a magic word, and our dust-covered American auto drew crowds of the curious, peering in the windows, reading the official plate-size sticker on the windshield, examining our license plates.

Typical was a stop in Zagreb, where a prim, white-haired lady in black stepped out of the crowd around the car as we approached.

"Where are you from?" she asked in German.

"America."

"America! But that's so far! Can it be possible?"

As we prepared to leave, several people came forward and shook our hands.

### Office Workers, Housewives Lay Bricks

On the outskirts of the city we watched office workers and housewives laboring evenings to build big apartment houses.

"You from America?" boomed a gruff voice behind me.

Wheeling, I confronted a burly man, stripped to the waist, trowel in one hand, brick in the other.

"Thought so," he said. "I lived 33 years in Detroit. Got three grown kids there. Came back two years ago to see my old mother."

"Going back to the States?" I asked.

"Maybe. But first I'm gonna stick around and see how this Five Year Plan works out."

Everywhere new buildings bore whitewashed slogans: "Long Live Tito," "Long Live Tito's Five Year Plan," "Tito Is the Initiator of All Successes."

Window-shopping on the "free market," in Belgrade (Beograd), I got a jolt. At official exchange rates, shoes were the equivalent of \$40 to \$80 a pair (\$10 with a ration card). Men's suits averaged \$240; cotton dress goods, \$34 a yard; pajamas, \$29; men's shirts, \$20.

The average worker, we were told, makes the equivalent of \$60 to \$80 a month; an engineer, \$100 to \$120; a top professional man or high Government official, \$160. Workers often run their pay up with overtime.

### \$70 for Second-hand Thermos Bottle

Needing a thermos, we browsed in Government "commission stores," second-hand shops where almost anything can be found—at astronomical prices. On our third attempt we found a battered bottle, but quickly changed our mind when the tag read \$70.

Five years after the war it is still difficult to find a comb, button, shoelaces, pencils, or a host of everyday items in Belgrade. Marshal Tito's Five Year Plan to industrialize Yugoslavia sacrifices such goods to the production of trucks and tractors.

For its lack of subservience to Russia's will, the Cominform ousted Tito's party in June, 1948. The Government remains Communist, however, owning all business, natural resources, and means of production. It controls every aspect of the citizen's life.

A small percentage of the people, perhaps



### Where the World's Troubles Started, Where the First Great War Began—Sarajevo

Touring Yugoslavia, the author observed wild enthusiasm for, and outspoken resentment against, the new regime. People worked zealously, denying themselves luxuries, to make the nation strong. They endured drought, high prices, and acute shortages. Here in Sarajevo, a Serbian student, by assassinating an Austrian archduke in June, 1914, set the world on fire. Events he started unleashed Russia's Bolshevik Revolution, making Communist Yugoslavia what she is today. Old Sarajevo is Turkish, as minaret and veils attest (p. 166).

five percent, makes up the country's Communist core as party members. Among the nation's peasants, who still comprise three-quarters of the population, widespread opposition to abandonment of private ownership has caused the Government to go slowly with collectivization of farms (page 148).

In our divided world, Yugoslavia, almost surrounded by Russian satellites, walks a tightrope between East and West (map, page 144).\*

We began our journey through Titoland late last summer in the upper Drava River valley

on the Austro-Yugoslavian frontier. Saying *auf Wiedersehen* to Austrian border guards, we zigzagged across a road-block-studded no man's land to the Yugoslav barrier.

An unarmed teen-age soldier, wearing the red star of Communism, ran forward and raised the gate. Smiling, he motioned that he wanted to get in with us. A few wordless

\* For wartime and prewar background, see, in the NATIONAL GEOGRAPHIC MAGAZINE: "The Clock Turns Back in Yugoslavia," by Ethel Chamberlain Porter, April, 1944; "Echoes from Yugoslavia" (16 ills.), June, 1941; and other presentations listed in the NATIONAL GEOGRAPHIC MAGAZINE Cumulative Index, 1899-1950.



### A Lumbermen's Ferry Carries the Goggled Author Across the Sava River

Motoring in backwoods Yugoslavia is never dull; surprises wait around most every turn. Stalled army tanks, dead-end highways, bombed-out bridges, and hair-raising mountain roads constitute hazards. Few highways are paved with anything more than dust. Signposts are scarce; garages even rarer. The wise motorist facing a long trip loads his car with extra gasoline, food, and spare parts. Mr. Long made a 30-day tour. Everywhere he found the people friendly; the magic word "America" opened the way for him.

minutes later we drew up before police headquarters in frontier Dravograd.

In an upper room, bare except for table, chair, and Tito picture, cameraman "Kurt" Wentzel answered questions for both of us in German while I small-talked with a lanky noncom who had learned English from GI's in Germany. Soldiers lounging outside crowded around the auto; others left chess games to inspect this product of American industry.

In the near-by customs house, our next stop, an efficient German-speaking civilian filled out interminable forms. On the street he glanced

through our baggage while curious townspeople watched.

We followed the swift, olive-green Drava to the town of Maribor. Apple trees, heavy with fruit, lined the country road for miles. Trudging peasants turned to stare; tanned youngsters splashing in an ol' swimmin' hole shouted and waved. Across the river a puffing train paced us down the valley.

Several new hydroelectric dams, heavily guarded, straddled the river. High-tension towers, still wearing orange priming coats, lined the hills.



**Yugoslavia Has 7 Major Frontiers to Watch; on 4 She Faces Russia's Menacing Satellites**

Largest nation in the Balkans, Yugoslavia keeps guard against Hungary, Romania, Bulgaria, and Albania, all Soviet puppets. Italy, Greece, and most of occupied Austria, once objects of suspicion, stand with her outside the Iron Curtain. Yugoslavia contains a population of some 16 millions, divided among five South Slav peoples. Her main languages are four; her chief religions, three.

Though it was Sunday, men and women laid bricks for a housing development. Others stacked logs for lumber mills or raked hay in fragrant fields. No week-end motor traffic slowed us down; we saw one auto all afternoon. Chief local conveyance was a two-seater buckboard-type carriage like ones I'd seen down on the farm years ago.

Promenading crowds, largely off-duty soldiers, filled Maribor's main square. Sidewalk vendors sold apple juice from big casks. A loud-speaker blared band music as a company of rifle-toting soldiers marched by. A trailer truck converted into a stand-up bus made its appointed rounds.

In an almost empty corner café we asked for cups of chocolate in German, French, and English. The waiter brought us each a small pudding. We tried ordering coffee and got it—ersatz. The bill for two came to the equivalent of \$3.50.

From our hotel flapped a blood-red flag

bearing the words "Commune de Paris." Inside, bronzed youngsters in hiking outfits with rucksacks on their backs jammed the lobby. They were a French Communist youth brigade en route to help build the new Student City rising outside Zagreb (page 147).

In that crowded lobby we met Putnik, the traveler's rod and staff in Yugoslavia. Official Government travel agency, Putnik assigns visitors hotel rooms, issues gasoline coupons, transportation tickets, and a special currency for foreigners. Hotels are State-owned; the best in each city is reserved for foreigners and high officials.

At the legal exchange rate, a U. S. dollar buys 50 Yugoslav *dinars*; 50 dinars buy very little. But when the foreign visitor pays in Putnik scrip (also 50 to the dollar), his bill for room and board is cut in half.

Next day, with our Putnik friend, we toured the town. Three-quarters of its shops were closed; those open had little to display. In



### Marshal Tito, the Communist Who Defied the Kremlin, Reviews His War-ready Army

Yugoslavia's Army, of 30-odd divisions, is considered Western Europe's largest. Its arms came largely from Russian and Czech factories before Tito's break with the Cominform in 1948. Today the West initiates its own aid in the form of food, to bolster drought-stricken Yugoslavia. In World War II Yugoslav Partisans under Tito cut to pieces some 30 Axis divisions in guerrilla warfare.

a small square we inspected a fleet of brand-new 10-ton trucks, made locally. Later we saw textile plants and an underground factory inherited from the Germans, now making bridge parts. Although 4,000 German and Allied bombs blasted Maribor, there was little evidence of war damage left.

Through rich farmland and sleepy, sun-drenched villages we drove to Zagreb, Yugoslavia's second city and its cultural center (page 146). Asking our way to the Putnik office, I noticed we were on Franklina Roosevelt Street.

Early next morning we mingled with the crowd in Zagreb's colorful outdoor market. Geese, chickens, and ducks added barnyard noises to the babble of voices. Tables groaned under lush fruit and vegetables, cheeses, wine jugs, and mounds of mushrooms. Peasant girls in native costume weighed small portions on hand scales. Prices were high. Housewives with martyred looks shopped long and thought twice before buying.

By cable car we climbed to Zagreb's Upper Town and lost a few centuries in as many minutes. Its central landmark is 13th-century St. Mark's Church, with the arms of the city and the medieval Kingdom of Croatia emblazoned on its roof in brightly colored tiles.

Former palaces, now Government buildings, border the church square. From it runs a web of narrow streets lined with venerable homes. Under the old city's one remaining gate, peasant women knelt at St. Mary's shrine.

From a tree-shaded promenade we looked down on modern Zagreb. Parks, wide boulevards, and pretentious public buildings of the 19th century, many sporting red stars and political slogans, stood out in a patchwork of tile roofs and chimney pots. In the background an arc of factories exhaled a cloud of smoke. Mammoth apartment houses, some unfinished, gleamed white in the sun.

With a guide-interpreter from the local Information Bureau we visited one of these workers' projects, a group of five 50-flat buildings. Two were finished and occupied, the others in various stages of completion.

A gang of men and women shoveled gravel into small cars and trundled them on tracks to big troughs. Others mixed cement or carried bricks up four flights to workers high on wooden scaffolding.

"Neighborhood brigades come out here after their day's work is done," the foreman told us. "One shift works from 4 to 7 o'clock, another from 7 to 10."

"What do they get for it?" I asked.

In answer he showed us ration coupons enabling the holder to buy scarce consumer goods and food at controlled prices.

We climbed to watch a red-banner gang laying bricks atop the last building. Spark-plug of this prize-winning team was a sturdy, barefooted woman in her fifties wearing overalls and a bandanna kerchief.

"Only a few professionals work on these projects," the foreman went on. "Amateurs



**Lone Car Leads Cycle and Cart Down a Wide Avenue. Plainly, Zagreb Is a Pedestrians' Town**  
Yugoslavia builds a few trucks. Patched-up European and American cars, a few buses, and many carts keep the country moving. Spires belong to Zagreb's cathedral. Cone-roofed towers defend 15th-century walls (page 145).

do the unskilled work, but some, like this housewife, earn diplomas in trade schools at night. Last year she put in 1,200 hours laying bricks. Says she likes it, too."

Next day we saw youth brigades from Yugoslavia and a dozen Western European nations building Student City outside Zagreb. Their countries' flags, flying from a score of scaffold-swathed buildings, made it look like the UN on location.

"Studentski grad," our guide told us, "will be a complete university city for 12,000 students—dormitories, lecture rooms, labs, stores, gymnasiums, theaters—everything. These foreign brigades pay their way to Yugoslavia, work here three weeks, and get a week's tour of our vacation spots free. They come and go, but we average about 1,500 workers.

"Come around some evening; we have outdoor movies, sings, and national dances."

I wondered how anyone could dance, or even watch a movie, after the tough day's work these youths were putting in. In 100-degree heat they shoveled gravel, dug ditches, hauled rocks, and ran up and down ramps carrying cement and bricks. Suntanned Amazons kept pace with the "stronger" sex.

The only machines I saw were a few cement mixers and trucks. Strong backs and calloused hands, armed with primitive wheelbarrows, shovels, and two-man hods, did the rest.

Work brigades like these hand-made the new 240-mile Zagreb-Belgrade superhighway, on which we sped to Yugoslavia's capital. Almost arrow-straight, it's only 12 miles longer than the air distance between the two cities. It hits no towns, has no intersections, railway crossings, gas stations, garages, or eating places—and practically no traffic.

#### Oxcarts Lumber on Modern Superhighway

We made the trip in less than five hours, saw three autos and a dozen trucks en route. Only traffic hazards were lumbering oxcarts, farm wagons, and flocks of sheep. Cart-pulling horses shied and reared at our approach.

As we drove southeast, the table-flat Sava River plain widened. A pitiless sun scorched the rich earth; vast fields of stunted corn and sunflowers withered in the shimmering heat. Widespread drought, we later learned, destroyed some 4,000,000 tons of food and fodder during the torrid summer, conjuring up the specter of famine.

Near our destination we drove past the stark skeletons of unfinished buildings that mark New Belgrade on the old city's outskirts. A human tide of workers, afoot and in trucks, flowed to the site. Singing youth brigades marched to accordion music, bearing Yugo-

slavia's lone-star flag and other banners (pages 150, 232, 238).

Over a narrow bottleneck bridge we inched across the muddy Sava through milling crowds, oxcarts, wagons, cyclists, pushcarts, and shouting vendors.

Belgrade crowns a strategic headland where Danube and Sava Rivers meet. For centuries invaders have besieged and sacked this important key to the Balkans. Celts, Romans, Byzantines, Franks, Bulgarians, Hungarians, and Turks ruled it before modern Serbs gained their independence.

Today few old buildings remain; new or rebuilt structures stand out everywhere in unweathered brightness. Recovering from World War II, which destroyed a fifth of its buildings, the city looks like a boom town.

#### Loud-speaker, Belgrade Alarm Clock

Music blaring from a loud-speaker atop Belgrade's highest building woke us at 6 our first morning. Already crowds swarmed the city's streets and construction gangs were hard at work.

Belgrade brings to focus the spirit, hopes, accomplishments, and foibles of postwar Yugoslavia. Visitors are conscious of a boundless energy, of a nation pulling itself up by the bootstraps. The leather for the straps is short, but the muscle for the pulling is there.

Americans in Belgrade two years or more tell of the city's face-lifting—of streets widened and changed, old buildings restored and new ones built, shops reopened, and fuller store windows. But many projects remain unfinished for lack of labor or materials. People wait hours in long lines for buses and the movies, to buy meat, milk, or cigarettes.

Ration cards provide a bare minimum of food and clothing at controlled prices. If a buyer wants more, he goes on the free market, where prices soar.

On the eve of World War I, Belgrade, capital of Serbia, had 100,000 inhabitants. As the hub of Tito's Yugoslavia, this mushrooming city has almost four times that number.

Standing on the Terazije, Belgrade's main street (page 162), the visitor sees a fascinating cross section of the country's mixed population go by. Blond Croats and Slovenes brush past swarthy Serbs and Montenegrins. Dignified peasants in jodhpurlike pants and sheepskin vests stroll proudly, their feet in rags. Bare-footed women carry bundles on heads or baskets on long shoulder poles. Red fezzes and sandals with turned-up toes bespeak the East.

Americans in Belgrade since before Tito's break with Russia tell of other significant changes. Western Europeans and Americans



get Yugoslav visas without delay. Western correspondents are free to roam the country except for narrow zones on satellite frontiers. The Government has pruned its bureaucracy, delegated more powers to the six "republics" that constitute Yugoslavia, allows unorganized grumbling among the people, and encourages self-criticism within the party.

#### Stalin Disappears; Marx, Lenin Stay

Stalin pictures have disappeared, though Marx and Lenin are displayed. Radio and newspapers report international news straight. American dance music is accepted, and foreign movies come from the West.

In Zagreb I noticed a directory of 14 movie houses. Seven were showing American films; three, British; two, French; one, Austrian; one, Italian. Tarzan was the current box-office hit, both there and in Belgrade.

From the ramparts of the old Turkish fort we had a lookout's view of the capital and its environs. The Danube, looking bluer than I'd seen it in Vienna, meandered in big loops. Only the gaunt forms of New Belgrade interrupted the sweep of its wide plain horizonward. Bathers sunned on quays or swam in the muddy Sava (page 167). In the fort's dry moat tennis enthusiasts walloped balls across nets.

In an outdoor theater that night we watched ballet under a golden harvest moon. Dancers in brilliant peasant costumes told in rhythm an old Macedonian legend. Later we returned to see an excellent performance of *The Barber of Seville*.

Bearing special passes, we visited Film City, the Yugoslav Hollywood. With English-speaking George Babić we toured big studios, laboratories, workshops, and offices.

Begun from scratch in 1947, the project is about a quarter finished. Plans call for a gigantic film industry here and a model town for 15,000 movie-making workers.

Shooting while it's building, Film City has turned out a dozen feature-length films plus a host of short subjects. In a cavernous studio we watched a camera crew shoot a sequence from *The Boy Mita*, a story of Partisan youth during the Liberation (page 163).

In the projection room we saw a new film, *The Magic Sword*, a 7th-century Serbian fairy tale. I watched entranced while a lowly shepherd won the hand of a princess by defeating his rivals and answering a riddle.

"What's the riddle?" I asked Babić.

"It has three parts," he answered. "What's the sharpest thing in the world? the strongest? the most beautiful?"

"Give up," I said. "What are they?"

"Wait," he said. "The hero's answering now. Truth . . . Love . . . Liberty."

Before leaving Belgrade we made a Sunday sally north into the Vojvodina, rich breadbasket of Yugoslavia. Vast fields of parched corn and other grains stretched as far as the eye could see. Factories amid cornfields were going full blast.

In Stara Pazova, a Slovak minority village dating back 280 years, we watched the Lutheran church let out—maidens, matrons, and men in that order. Carrying Bibles and flowers, the women were decked in gorgeous native costumes that left us gaping (pages 154, 155). Smiling, they posed for pictures, while their menfolk cracked jokes and little boys scrambled for burned-out flash bulbs.

Our self-appointed guide was Vladimir Hurban, a town baker with bristling mustache who had worked two years in Pittsburgh. He took us to his neat cottage on the dusty main street, showed us his flock of prize pigeons, and drove us to the town's near-by cooperative farm.

In this flat, fertile Vojvodina, co-op farms account for nearly half of the arable land, but in Yugoslavia as a whole the figure drops to about 20 percent. Farmers still own 75 percent privately; the remaining 5 is owned directly by the Government as State farms.

Some three years ago, under a propaganda barrage, Stara Pazova farmers formed this 4,600-acre farm. They pooled land, animals, and tools, each man receiving shares in proportion to his contribution.

To music from an outdoor amplifier we inspected this communal farm with the overseer. New brick buildings enclosed the barnyard; a large structure stood half finished. Sleek cows chewed their cud in the dairy barn while apple-cheeked maids waited for milking time.

Cooperative pigs behaved like capitalist pigs in an open cobble-stoned enclosure. Calves and colts gamboled in their own fenced-in areas. Some 200 horses stomped in their stalls. The only machines I saw were three tractors and two threshers.

#### Yugoslav Breadbasket Hit by Drought

"We grow corn, wheat, oats, potatoes, sugar beets, grapes, and soybeans," the overseer told us. "But crops are poor this year. No rain."

Questions and answers relayed through English, German, and Serbian brought out how the co-op we saw works.

A council of nine members runs the farm, we were told. They assign jobs, do the paper work, and also labor in the fields. Six hundred villagers, men and women, work on



**Rumors Fly, Hands Work Overtime When Yugoslavia's Rural Grapevine Goes into Action**

Bent under a load of vineyard cuttings, Granny unlimbers a distaff as she gossips; her friend knits. Author and cameraman, on a 2,700-mile swing through Titoland, met them on the Dalmatian coast.



## New Buildings Rise as Toil-hardened Muscles of Youth Brigades Change Yugoslavia's Face

An acute labor shortage plagues the Tito Government. Brigades of youths, recruited for short terms, do backbreaking jobs on housing units, university buildings, and factories springing up all over this Balkan nation. Construction projects are almost handmade; big machines are lacking.

Above: Flags flying, a peasant brigade working at New Belgrade, on the old capital's outskirts, marches to its midday meal after toiling seven hours in nearly 100-degree heat. While assembling, many of the youths cavorted in native Serbian dances or wrestled like bear cubs. Soccer and courses in bricklaying fill their afternoons.

Below: The muscle power is imported. Members of an Italian volunteer group work on a vast 4,000-unit apartment house project in New Belgrade.

© National Geographic Society

131



Illustration by Vladimir Vostrikov



Mostar's Minarets, Crumbling Walls, and Graceful Stone Bridge Recall the Rule of Turkish Sultans in Barren Herzegovina.

### Gleaming Dubrovnik, Born of the Blue Adriatic, Drowns On, a Living Example of the Walled Medieval City-State

Formerly Ragusa, the city waxed rich as a maritime power in the Middle Ages. Its countless ships, called "ragusies," gave the English language romantic "argosy."  
Clever diplomacy kept the tiny city-republic independent for centuries. To walk through its limestone gates is to enter the 15th century.

© National Geographic Society

133

Redaction by Vicktor Wentzel





Young in Old: On Sunday, Girls of Stara Pazova Sport the Fashions of Slovak Ancestors Who Settled near Belgrade in 1670

### A Co-op Calf Fails to Cooperate; an Ice Cream Cone Might Help

It took coaxing by this apple-cheeked milkmaid on the cooperative farm in Stara Pazova to get her stubborn charge to pose. The little girls had no hesitancy—especially after being treated to cones.

Stara Pazova lies in the flat, fertile Vojvodina, the breadbasket of Yugoslavia, which stretches north of Belgrade. There about 45 percent of the arable land, some of the richest in Europe, has been collected into big cooperative farms. In the country as a whole the figure drops to 20 percent; independent farmers still own the remainder.

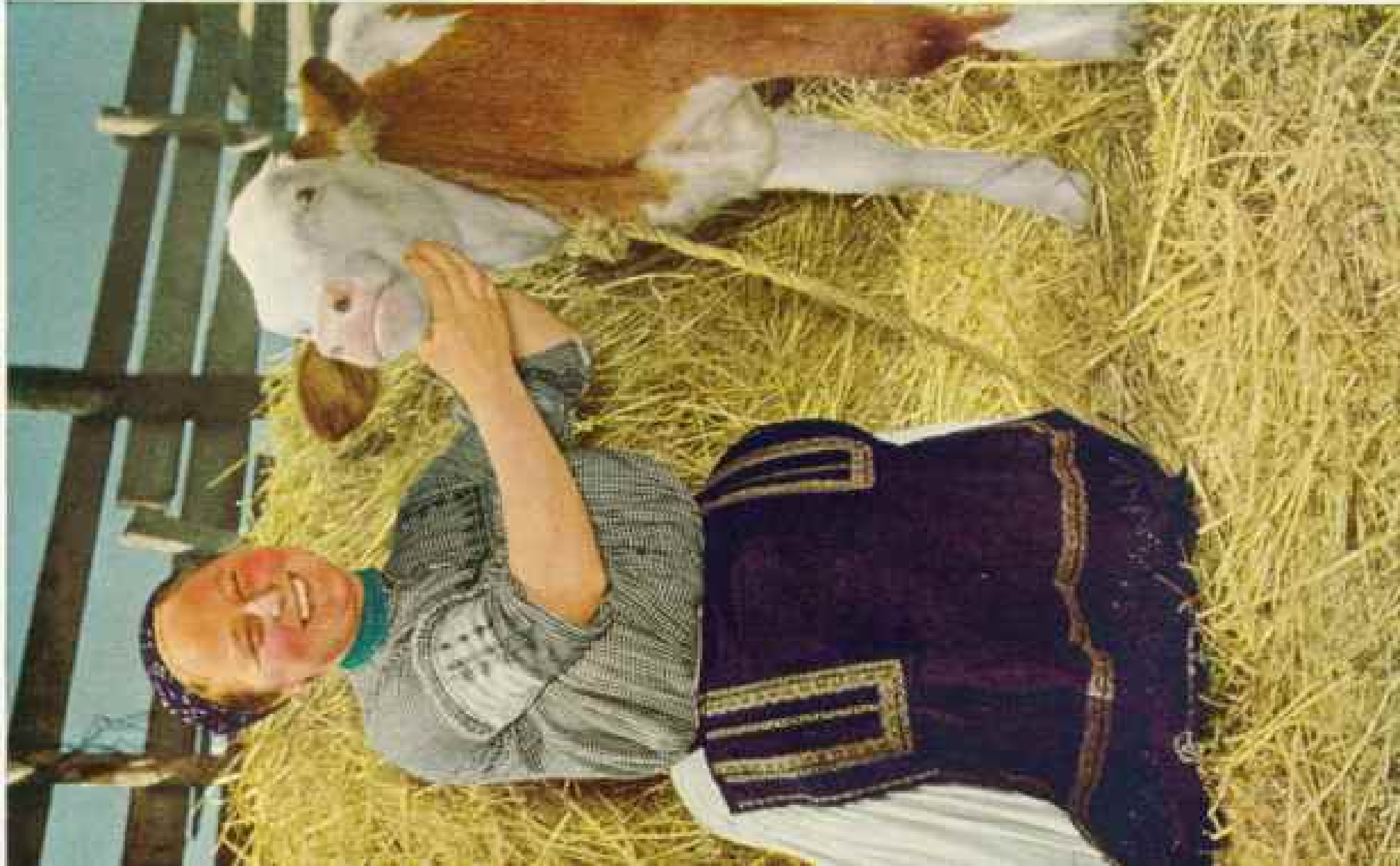
A few years ago Stara Pazova farmers voted to pool their land, animals, and tools to form a cooperative. Each received a stake in the new venture comparable to his contribution.

An elected Council of Nine runs the 4,600-acre farm. The lion's share of its produce goes to the State at fixed prices; any surplus may be sold on the free market. Workers are paid in kind and cash.

Last summer prolonged drought parched Yugoslavia, stunting and wilting crops. The country lost some 4,000,000 tons of badly needed food and fodder.

© National Geographic Society

Reproduced by Volkmar Wentzel



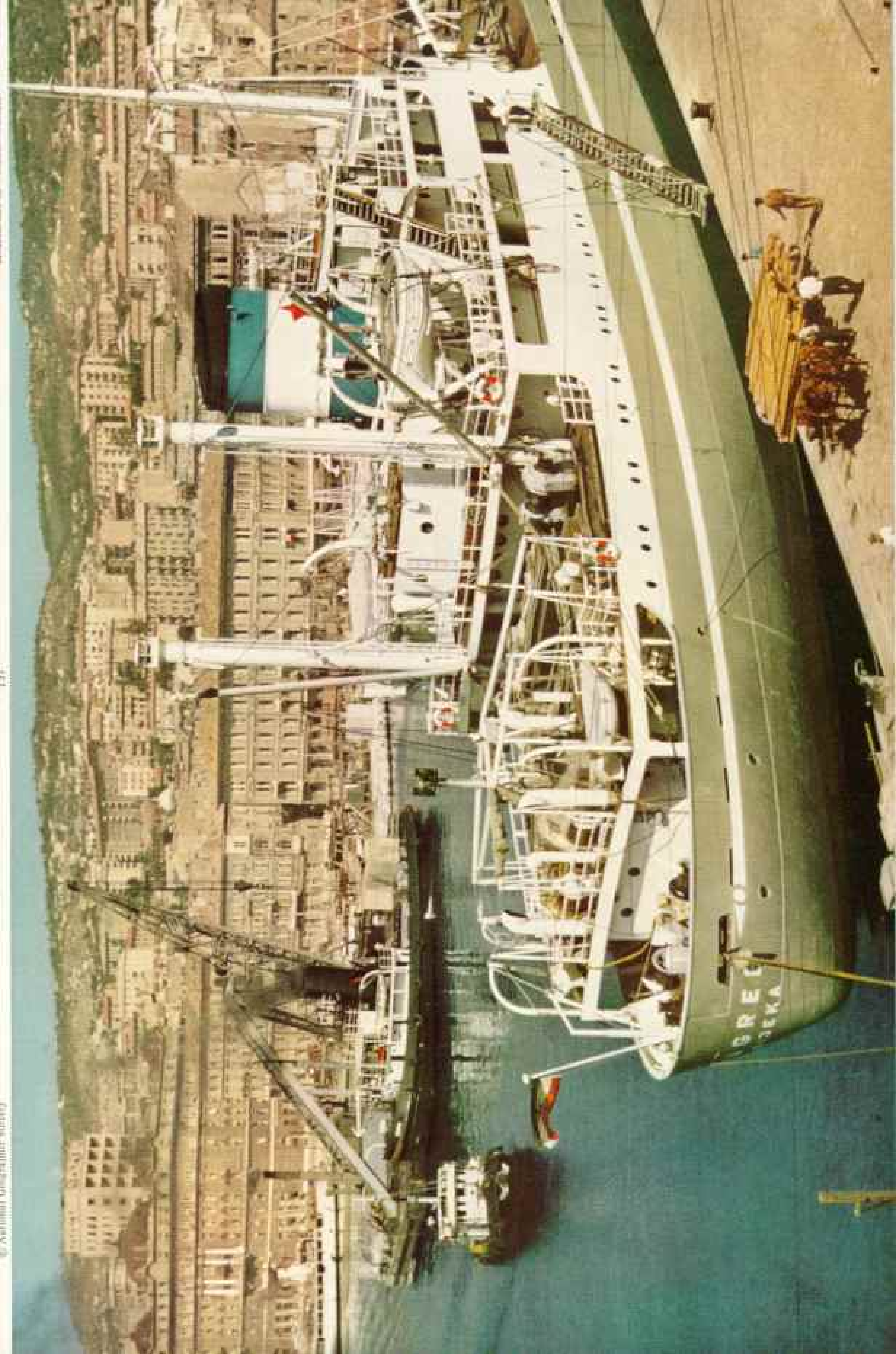


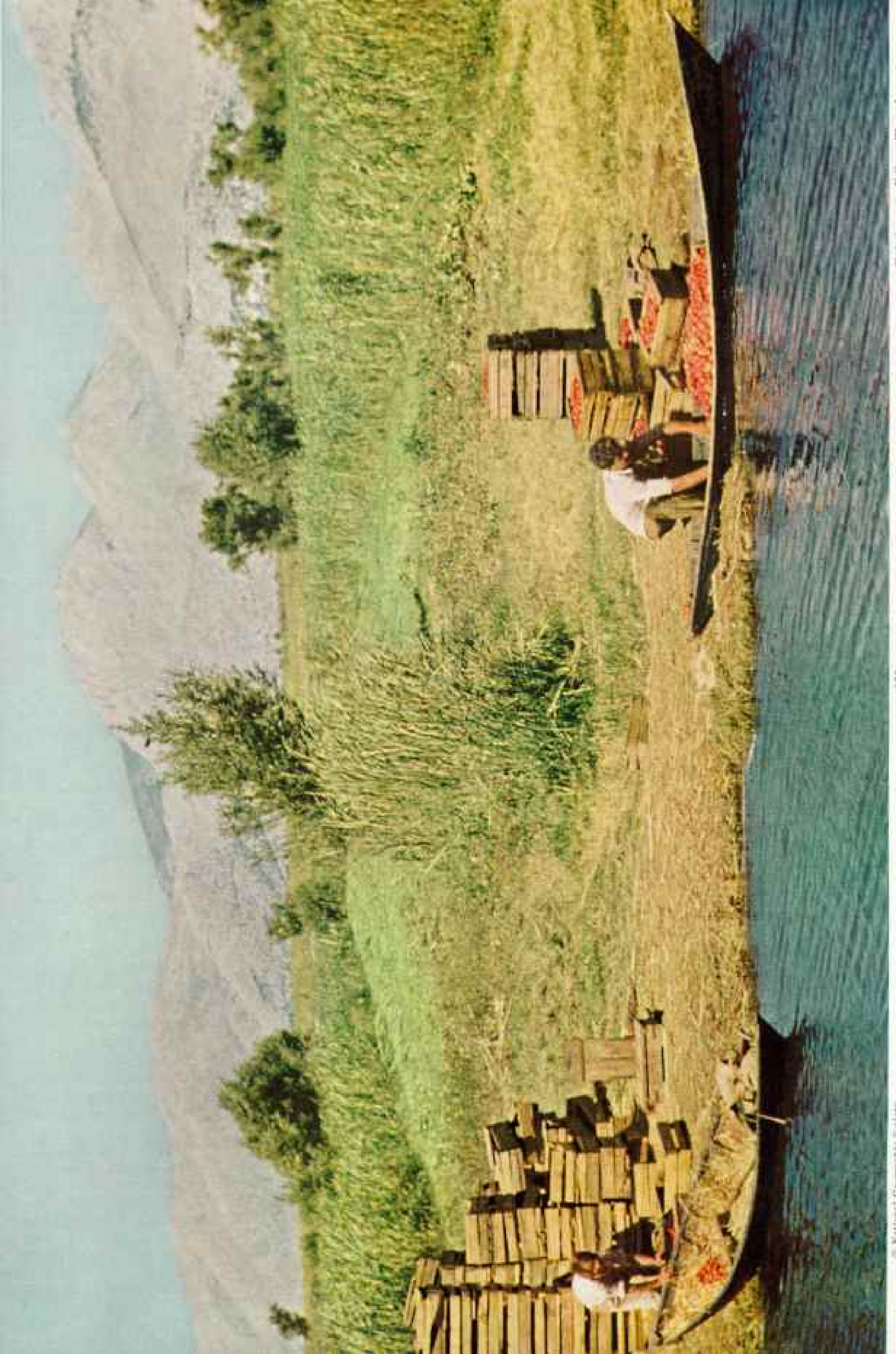


**Aged Budva Slumbers in Dalmatian Sunshine; Increased Trade with the West Booms Rijeka, Formerly Italian Fiume (Below)**

Budva's past goes back to pre-Roman days. The quiet town straddles a sandy peninsula south of the Gulf of Kotor. Walls and a fortress (right) once protected it. Now Yugoslavia's chief port, Rijeka was long a bone of contention between Slavs and Italians. In 1919 D'Annunzio's "legionnaires" seized it; 28 years later Yugoslavia occupied the city. Almost totally destroyed in World War II, the rebuilt port doubles prewar capacity. By 1948 its traffic exceeded 1939's.

Moored in the foreground below is *Zagreb*, one of a fleet of trim, 4,000-ton merchant ships built in Rijeka shipyards during the last two years. Here one of her ten electric cranes loads rough-sawn lumber, one of Rijeka's chief exports.





### In Straw-lined, Double-end Skiffs, Amphibious Peasants Gather Bountiful Yields from Drought-free Delta Farms

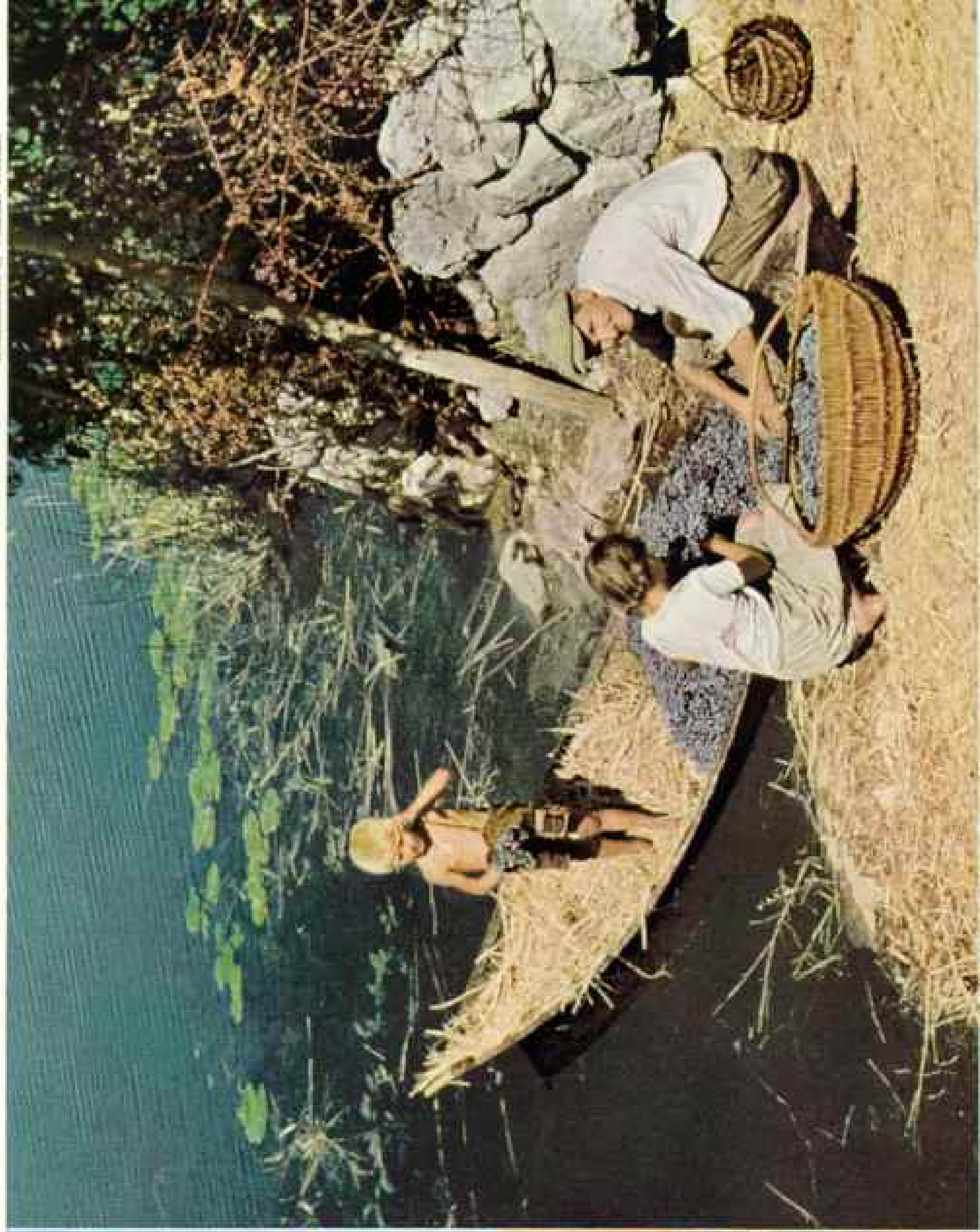
Only sizeable river to pierce Dalmatia's barren coastal mountains is the swift Neretva. A maze of irrigation canals transforms its sandy delta into a fertile oasis. At harvesttime farmers paddle lily-covered waters, their boats loaded to the gunwales with the lush fruits of their labor. Arriving here after days of driving the dusty roads of sun-scorched Yugoslavia, the author thought he was seeing a mirage.

Above: Father and son harvest and crate red-ripe tomatoes. Below: Youngsters help gather juice-laden Dalmatian grapes. Vineyards of Yugoslavia's semitropical Adriatic coast, usually climbing steep mountain slopes on terraces, produce excellent wine; the best grades are exported.

© National Geographic Society

159

Godwinman by Volkmart Woutaal





© National Geographic Society

160

Reproduction by Volker Wenzel

### City Within a City, Diocletian's 1,650-year-old Palace Is Still the Hub of Modern Split, Yugoslavia's Second Seaport

Covering nine and one-half acres, the palace fronts the small inner harbor in the left background above (close-up below). Large ships moor at the quays farther out. Behind the growing city, on a deep sea arm, a new landlocked port mushroomed. Until Fiume's acquisition in 1947 (page 157), Split was Yugoslavia's largest seaport. Below: A jam-packed wooden ship clears the inner harbor for a near-by island; in the background is the palace. Twelve centuries ago a town grew up within its protecting walls, and a sizable fraction of Split's population still lives there. Palm-fringed esplanade is modern; in Diocletian's day waves lapped the seaward wall's foundations. Houses built against and into the wall almost obscure its classic facade.



### Motorists Direct Traffic Cops in Belgrade Streets

In Yugoslav cities motorists approaching a traffic officer on duty signal their intentions by horn—one toot to continue straight, two for a right turn, three for a left. Instantly the policeman wheels and points the way with a white-gloved flourish. Only when two vehicles might crash does he hold one up. Foreign drivers, when they catch on, get an unaccustomed pleasure from their new-found power.

This broad thoroughfare is the Terazije, the capital's main shopping street. Even here in the heart of the nation's largest city there is no traffic problem. As yet, Yugoslavia's motor industry manufactures only trucks.

Pedestrians, naturally, are not traffic-minded. They wander about in the streets and jaywalk without a glance in either direction.

In the country a motorist may drive all day and encounter only a few automobiles. In five hours on the new Zareb-Belgrade superhighway the author met three.

In the background appears the 11-story Albanija Building, the city's tallest. A loudspeaker on its roof blares music early in the morning. At left a crowd awaits an approaching bus. Star of Communism tops light poles.

© National Geographic Society  
Reproduction by Volkmar Westend





## Lights! Action! Camera! Film City, Yugoslavia's New Hollywood, Shoots a Wartime Thriller

Actors get directions before the filming of a sequence from *The Boy Mita*, a stirring tale of Partisan youth during the German occupation. In the scene an "enemy agent," seated at the table, cross-examines the youth in the plaid shirt. Technicians stand by.

Prewar Yugoslavia had no motion-picture industry. Starting from scratch, the Tito Government organized Zvezda (Star) Film and in 1947 began building Film City on a hill outside Belgrade. Today the big project is about one-third finished. Shooting as it builds, Zvezda has produced numerous short subjects and a dozen feature films.

When completed, Film City will include a model town for 10,000 movie-making workers. Schedules call for 25 feature films a year, a weekly newsreel, and monthly reviews.

Yugoslavs are avid movie fans. In Belgrade crowds line up to see shows as early as 8 o'clock in the morning. Postwar theater attendance has zoomed. Last year roving projection crews, taking films to rural areas, showed more than a million peasants their first movie. Foreign films from the Western World are popular; last summer Tarzan was the big box-office hit.

© National Geographic Society

Kodachrome by Volker Wortel





© National Geographic Society

164

Kadachromes by Volkmar Weitzel

↑ **Even with Such a Load on Her Mind,  
This Croatian Farm Girl Can Smile**

Sturdy daughter of an independent farmer near Zagreb, she blushed with shyness at sight of the camera. Neighbors and relatives ran out to see the fun, shouted encouragement—then she beamed. A twisted head roll cushions her basket, full of grapes she has just picked.

↘ **Slovenian Women Catch Up on Local  
News at a Sunday Hop-picking Bee**

Whole families worked to strip this roadside field near Dravograd on the Yugoslav-Austrian frontier. While the women picked, children emptied their baskets into barrels and men pulled down tall poles supporting the vines. Having their picture taken was a big joke.



the co-op: each gets paid in cash and kind, according to his share and the number of hours worked. Most of the farm's produce goes to the State at fixed prices; what's left after members get their share can be sold on the free market.

"What about the farmer who tills his own land?" I asked. "How does he make out?"

These individualists, came the answer, must sell a fixed quota of their basic foodstuffs to the Government at low State-set prices. The surplus, if any, can be sold on the free market. The State controls the sale of fertilizer, tools, and machinery.

#### Surprises Test a Traveler's Wits

Back in Belgrade, we hunted long for a road map, finally got one from Putnik's manager, and headed for Sarajevo. An official permit to photograph—ending with the old Partisan slogan, "Death to Fascism, Liberty to the People"—identified us.

Backtracking on the superhighway, we found the main road to Sarajevo with some difficulty. A wide red line on our map, it turned out to be a pair of wagon tracks meandering across a field.

Once off the superhighway, we found driving conditions like those of backwoods America 50 years ago. We weren't to see another lengthy strip of paved road until our journey neared its end. Holes and rocks slowed us down until 25 miles an hour seemed like flying. Inches-thick dust seeped through floorboards; swirling in a cloud behind, it drifted on the car like snow. Signposts almost disappeared; garages were rarer.

We never knew what we'd find around the next curve. Beyond the village of Kuzmin a steep 20-foot railway embankment crossing the road blocked our advance. The road continued beyond it, but no way over or through this major obstacle had been provided.

We followed a wide-flanking wagon trail to the broad Sava River. With wheels locked, shouting teamsters drove drays loaded with Paul Bunyan-sized logs down a steep grade onto a bargelike ferry. We squeezed the auto aboard, its rear wheels scarcely on. Hand power pulled us across (page 143).

Soon the flat Sava plain gave way to crumpled foothills. In Bijeljina we saw the first mosques, Turkish-type dress, and veiled women of our journey. A tenth of Yugoslavia's 16,000,000 population are Moslems; in mountainous Bosnia the fraction jumps to three fifths. They are largely of pure Slavic stock, the curved sword of Islam having converted their ancestors centuries ago.

The old folks stick to traditional ways; the

young—even the girls—take jobs in industry and government, earn medical degrees, and play an active part in community life.

A recent Bosnian law forbids the wearing of the veil, but we saw these short black face coverings everywhere in parts of Yugoslavia once ruled by the Sultan.

Beyond Bijeljina the mountains grew bolder; seldom in high gear, we climbed and dipped on a tortuous ledge blasted from living rock. Bearded, fez-topped shepherds cleared a way for us through milling flocks of sheep and goats blocking the road. Plodding men in pantaloons and turned-up sandals led patient burros carrying loads twice their size. A pack-horse caravan, rearing and plunging, took to the hills at our approach.

High above a racing mountain torrent, we waited while workmen dynamited the crumbling ruins of a Turkish fort to make way for a hydroelectric dam. Whitewashed boulders on a near-by slope outlined a colossal star and hammer and sickle.

Moslem wives, spinning by their mud-brick huts, turned their backs on us. Peasants in narrow valley farms flailed and winnowed grain in timeless fashion.

In almost every rude hamlet, however small, a sizable new brick building stood out, its front plastered with political slogans. They are combined schools and civic centers, visible part of a campaign to unify these mountain people and stamp out illiteracy.

At night the narrow, twisting, rock-strewn road to Sarajevo, deep in the rugged heart of Bosnia, became a grim test of nerve. Too close for comfort, the railless outer roadside fell sheer a hundred yards. Suddenly the darkness swallowed us; we'd blown a fuse.

#### Down a Mountain Road by Flashlight

After 14 hours on the front seat, almost anything seemed better than sleeping there. While I beamed a pocket flashlight ahead, Kurt guided the auto, hugging the mountain side of the road.

Mile after endless mile, hour after weary hour, we crept along at a snail's pace until our eyes felt about to pop. They got a welcome treat as we rounded yet another turn. Twinkling like a thousand fallen stars, the lights of mountain-girt Sarajevo studded the valley below.

Next morning we viewed the city from an abandoned Moslem cemetery atop Poligon Mountain. Squeezed into a narrow valley, this secluded Bosnian capital climbs mountains. Walled houses on steep slopes seemed to stand on the shoulders of those below. Pink-tile roofs overlapped on the valley floor.

Slender minarets of 50-odd mosques pointed to the Moslem heaven (page 142).

Here conquering Turks built a mountain eyrie some 500 years ago. Today there are three Sarajevos. To the east lies the crowded Turkish quarter, huddled under the walls of an old fortress. Westward sprawls Tito's new Sarajevo, a collection of stark white housing units and factories. In the center, East meets West in the Hapsburg section, where Government buildings, stores, and offices give the look of a 19th-century Balkan city.

#### "Pickaninnies" in Sarajevo Bazaar

With a young Moslem guide we wandered the old city's narrow streets, met the sights, sounds, and smells of the East. Occasional new apartment dwellings looked efficient but out of place. In the market we mingled with veiled women haggling over a scant supply of fruit and vegetables. Juicy watermelons sold by the slice; youngsters in fezzes gorged themselves like pickaninnies.

In the once-famous bazaar, half the tiny shops were shuttered. The State is gradually monopolizing handicraft, but a few rugged individualists still hammered copper coffee-pots on the street of the metalsmiths or tacked leather straps to thick wooden soles on the street of the shoemakers. One shop offered fine filigree; another, Oriental rugs—but our purse was far too lean.

In stocking feet we walked on priceless Orientals inside 16th-century Husref Beg Mosque. A sad-eyed, white-bearded muezzin pointed out the exquisite workmanship of its mosaics and showed us a centuries-old Koran.

Later we stood in the steps of history at Princip Bridge, where shots rang out in 1914 and Austrian Archduke Franz Ferdinand met a fate that plunged the world into war and put Sarajevo on the map.

By auto we saw the newer "cities," visited public buildings, hospitals, and new Sarajevo University. Through the plate-glass window of the Children's Hospital nursery we saw a room full of new Bosnians. When a masked nurse in white held a squalling infant to the glass, I felt like a proud young father again.

We splashed out of Sarajevo in the rain and headed for Mostar, in barren Hercegovina. Over a wild, rocky land of jumbled geology we drove down the valley of the swift, green Neretva River and through its spectacular gorge. At Jablanica we watched youth brigades tolling on a big hydroelectric dam that will harness this headstrong torrent.

Only some 10 percent of Hercegovina, in small scattered plots, is arable. But its gray limestone mountains, growing a thin stubble

of stunted bush, hide a virtually untouched storehouse of vital minerals. So far, only iron ore—turned into steel in remote Zenica, Yugoslavia's Pittsburgh—is mined in any quantity. With Bosnia and the near-by Dalmatian coast, Hercegovina holds more than a fifth of the world's bauxite, crude ore of aluminum.

In this rugged land, perfect for guerrilla warfare, heroic Partisans held out against German armed might for years. At remote Jajce, Marshal Tito long had his wartime headquarters, now a national shrine.

In oasislike Mostar we found crowds lining the town's main bridge watching a daring youngster in swim trunks make repeated plunges from its railing into the swift river far below. Saturday-evening throngs promenaded in the near-by main square to music from the inevitable public loud-speakers. Clean-cut youths in Yugoslav Air Force blue filled our hotel dining room.

#### American Ads Make a Hit

In the lobby, over cups of thick Turkish coffee, we showed new-found friends copies of the NATIONAL GEOGRAPHIC and talked with them in basic English. They obeyed, abed, and made comments on the illustrations; but the advertisements—television and radio sets, sleek autos, streamlined trains, refrigerators, home freezers—bulged their eyes.

They reciprocated by taking us to an exhibition of products made in Mostar. A hundred exhibits, from nails to plumbing fixtures, filled a near-by villa. Many weren't in production yet but soon would be, they said.

"Mostar is Yugoslavia's most Turkish-looking town," the director told us. "For centuries it's been a sleepy, isolated village. Now comes the Industrial Revolution. When they start mining the rich bauxite deposits in these hills, Mostar will really boom."

Sunday morning, clear and almost cool in the wake of a violent thunderstorm, I rounded up gasoline while Kurt photographed (page 152). By noon we had climbed out of the valley and headed for fabulous Dubrovnik on the Dalmatian coast.

Cans of thirst-quenching fruit juice from an Army PX in Austria helped us across the arid Karst, a desolate region of stark limestone hills that parallels the coast. Its almost lifeless expanse resembles a landscape on the moon. Small, stone-walled plots of corn, tobacco, and cotton and a rare fig or olive grove were far-between islands in a sea of gray boulders. Big cement catchments for rain water were bone dry. Occasional roofless, bombed-out stone cottages, without life, added to the desolation.



### Belgrade Bathers Make the Sava's High Wall Their Sandless Beach on Hot Summer Days

World War II destroyed a fifth of Belgrade's buildings. Recovering, the capital looks like a boom town (page 147). The city straddles a headland where the Sava joins the Danube. In August the Government and embassies retreat to alpine Bled (page 169). Less fortunate citizens flock to river embankments.

A flat, fertile valley stabbing the Karst was our exit to the sea. As we followed it, high on an upland road, peasants harvested crops far below. Around a sharp turn the deep-blue, island-dotted Adriatic burst into view. Our feelings, we imagined, were akin to Balboa's when first he gazed on the broad Pacific.

In romantic Dubrovnik, long called Ragusa, we swam, sunned, and explored this beautiful, living example of the medieval city-state (page 153). Evenings we watched teams from 16 countries battling in strained silence for the world's chess championship. Yugoslavia won this ninth chess Olympiad, Argentina was runner-up, and the United States placed third.

Seated in an empty water-front café, we heard the little town's remarkable history from Lukša Beritić, former officer of the old Austrian Navy and now Dubrovnik's archivist.

His physician son, Tihomil, just returned from studying at McGill University, Montreal, translated.

"Refugees fleeing in 650 from near-by ancient Epidaurum (modern Cavtat) when the Avars sacked it founded Ragusa," he relayed. "In those days this peninsula was an island, but centuries later the channel was filled in and these stout walls built. As early as 1272 this independent city-state adopted a constitution guaranteeing citizens' rights.

"As a maritime power, Ragusa waxed rich in the Middle Ages. Her countless ships, called 'ragusies,' gave your language the word 'argosy.'

"The 15th and 16th centuries were the city's Golden Age. Poets and artists flourished here, wealthy merchants built fine villas, government was wise and just. But in 1667

### Mountain-girt Kotor Looks on a Scene of Wild Beauty

Kotor, as a seaport, has many natural disadvantages. The city occupies an isolated position on the Dalmatian coast, and its hinterland is barren. Frequent, unpredictable squalls roar down from the mountains. Strong currents in adjacent waters make navigation difficult.

On the credit side, Kotor boasts expanding industries and a fjord scenery unsurpassed by almost anything outside Norway (page 170).

The city (right) lies on the Gulf of Kotor, which is formed by four magnificent bays, of which this is one. Skyscraping mountains drop almost sheer into the water. Whenever possible, vineyards and groves climb the lower slopes. Olives, figs, and lemons are counted among the yield.

Factories and workers' apartments dot the plain in the center.

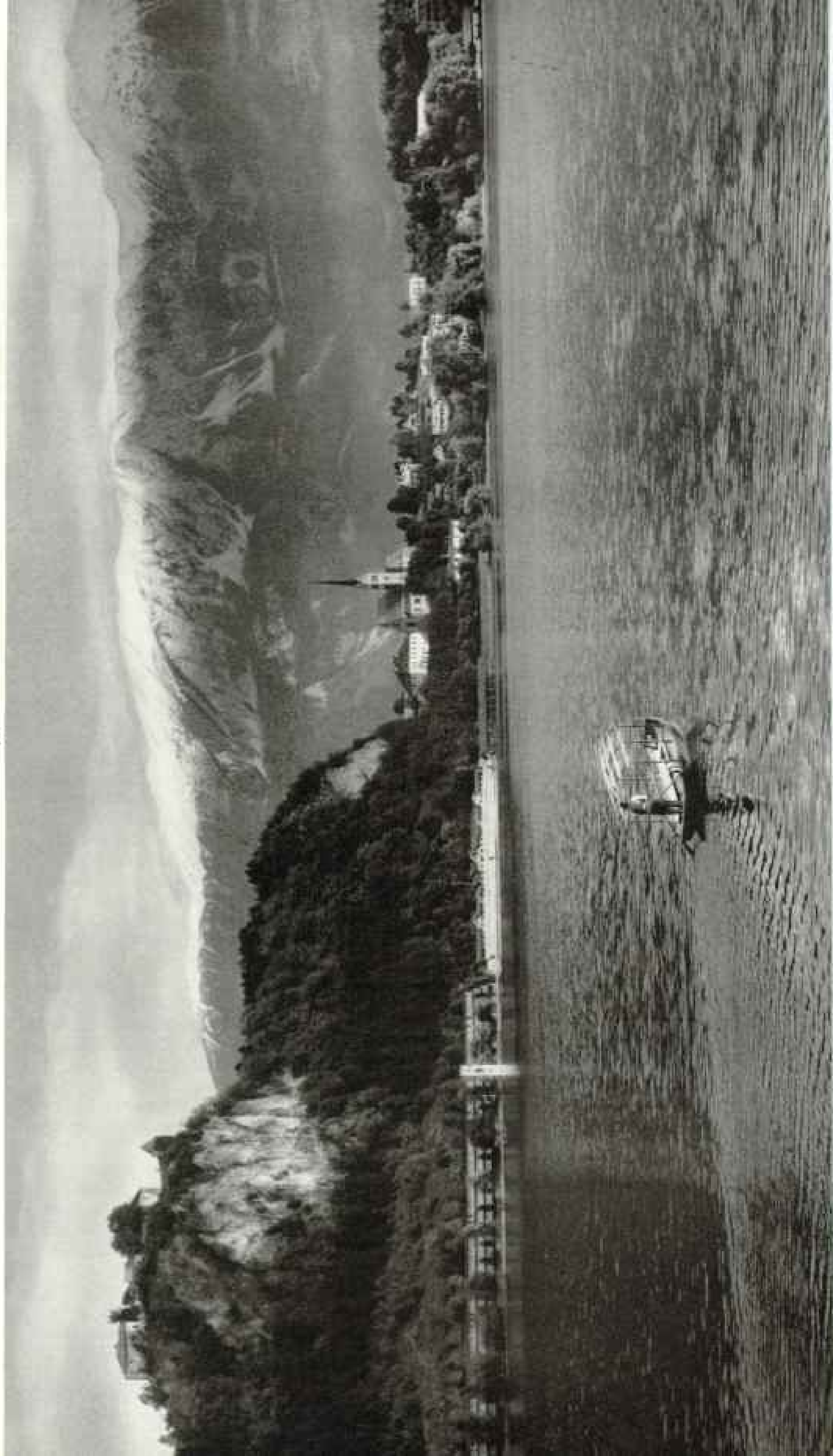
The serpentine road (right) here starts its climb to Cetinje, Montenegro's capital. Before travelers reach the summit, they have to round 40-odd hairpin turns. In recompense, they get a stupendous view of sea, mountains, and valleys.



**It's October, and All's Quiet in the Resort Town of Bled. Summer's Swimmers Are Gone, Winter's Skiers Not Yet Arrived.**

In August, when Marshal Tito occupies the former King's villa (not shown), Bled becomes Yugoslavia's summer capital. Then the lake is crowded with gondola-like water taxis, whose drivers stand up and push against their oars. Luxurious hotels, now largely rest homes for workers, line the shore. A thousand-year-old castle tops the bluff on the left. The massive Julian Alps wear the season's first mantle of snow.

109



a terrible earthquake leveled most of the city, and it never fully recovered."

Father and son took us in tow. We circled the town atop its walls, climbed to a magnificent view from old Fort San Lorenzo. Over its entrance, words carved in stone proclaimed, "Not for Gold Would We Sell Our Liberty." Crowning the mountain wall that backs Dubrovnik stood a crumbling Austrian fort; on the steep slope below it whitewashed boulders spelled "Tito Partija" (Party).

Inside the gleaming limestone city we strolled in narrow streets unchanged since Columbus sailed west. Grapevines growing in tubs climbed stone house fronts weathered the color of old parchment. Girls in gay native costumes, men in uniforms, and a sprinkling of foreign tourists promenaded and window-shopped. Bronze giants in the clock tower struck the hours, and housewives waited in a long queue for meat.

Bearded monks guided us through the Franciscan monastery and showed us its pharmacy, founded in 1317. They brought out its medieval prescription book and an illuminated geography book that was out of date the year it was hand-written—1492.

In the courtyard of the 15th-century Duke's Palace, now being restored, stood a bust of Michael Prazatto, rich merchant of the old republic. He left a fortune to ransom captive Ragusans and provide dowries for Ragusan brides. Until 1920 every town bride received 20,000 dinars, then a stout sum.

Wanting a souvenir, I entered a second-hand shop. A pair of woven Serbian sandals with turned-up toes caught my eye, but the price figured out at \$90. When I offered to trade my own loafers for them, I got the Croatian equivalent of "Nothing doing."

#### Remote Cetinje, the "Eagle's Nest"

Before leaving Dubrovnik we made a one-day sally southeast to remote Cetinje, capital of mountainous Montenegro. Through fishing villages and deserted vacation spots we skirted magnificent fjordlike Gulf of Kotor (Boka Kotorska). Beyond Kotor (page 168) we climbed a serpentine road that makes 40-odd hairpin turns to scale the rocky wall that rings the gulf. On its summit we paused to survey a sweeping mountain-sea panorama almost unsurpassed in Europe.

A stony wilderness surrounds Cetinje. In this "Eagle's Nest" hardy Montenegrins defied the Turks for centuries, and wily old Nicholas, their last king, presided over a musical-comedy court until his little country became part of Yugoslavia in 1919. Today Titograd, on a plain near the hermetically sealed Albanian

border, is the official capital of Montenegro, but actually Cetinje still is.

When we arrived, during Cetinje's midday break, workers were promenading the streets beneath slogan-covered banners. But no curious crowd surrounded our dusty, travel-weary auto the moment we stopped, as everywhere else in Yugoslavia. Behind the main Government building we found the answer—a fleet of shiny new American cars for official use. Our astonishment at being so unnoticed in this Shangri-la town was equaled on the road back when we passed a yellow bus labeled in English, "School Bus—Stop on Signal."

#### 1,000 Miles Along the Adriatic

From Albania to Trieste, Yugoslavia's famed Adriatic coast stretches some 400 miles in dramatic grandeur. Gray mountains in echelon, gaunt against the azure sky, slant steeply to the sea. Terraced vineyards and olive groves climb their lower slopes. Towns squeeze between rock wall and sea or perch on stony highland shoulders. Green islands in profusion sprinkle offshore waters.

Climbing, descending, tracing countless bays and inlets, we drove more than twice 400 miles along this spectacular shore. Bomb-blasted homes, rusting half-tracks, abandoned terraces, and crumbling ghost towns recalled grim war years. Tattered peasants worked steep, rocky farms that threatened to slide into the sea. Their barefooted womenfolk spun wool and tended flocks.

Often, in this land of shank's mare and burro travel, we took on hitch-hikers. Without exception they poured out bitter complaints about hard times and high prices. Without exception, too, they offered to pay for the ride; failing that, they showered us with grapes and figs.

Deserting the coast road only once, we found two army tanks, guns pointed menacingly in our direction, blocking the way. Backtracking a dozen miles, we found a bombed-out bridge our next problem. An LCT, chugging across the river, solved it. Later that day we waited hours while a unit of the Yugoslav Army, on maneuvers, "mined" another bridge.

Near Makarska, in a pine grove at the foot of towering mountains, devout peasants dressed in Sunday best knelt in prayer at a grotto shrine. For miles along the road we passed others, carrying olive branches, trudging to this Lourdes of Croatia.

Split's palm-fringed inner harbor bustled with carnivallike activity as we arrived; a loud-speaker, blaring tunes from *Rigoletto*, set a lively pace.



### Co-eds Share the Backbreaking Work of Building Zagreb's Student City

Here last summer youth brigades from a dozen European countries toiled beside Yugoslav youths constructing a university and town for 12,000 students. Their reward was a free tour of Yugoslav vacation spots. Boys had one complaint about the girls: some of them set too fast a pace (page 147).

In front of Diocletian's famous palace bare-footed men hauled carts piled high with fish, and sturdy girls, using their heads, unloaded heavy sacks of almonds from an open boat. Loungers cheered burly stevedores push-pulling balky mules across a gangplank. Embarking families piled household goods aboard a wooden schooner (page 161).

At quays farther out, big freighters loaded bleating sheep and bags of cement, disgorged sacks of precious sugar. Yugoslav destroyers rode at anchor; sailors on shore hoisted a billboard-size poster proclaiming Navy Day.

For a bird's-eye view of this second largest Yugoslav port we drove up near-by Mount Marjan. A narrow street ending unexpectedly in stone steps frustrated our first attempt to reach it. Quickly a crowd gathered; a dozen people offered advice and argued among themselves about the best course for the Americans to take. Above the hubbub a deep voice boomed, "I been two years in Chicago. I help you, you bet."

A portly figure emerged, introduced himself

as "Jack" Yelović. We backed the length of the street and with Jack's guidance reached Marjan's top. Below us Split sat on amphitheaterlike hills around its harbor (page 160).

Behind the old city a new Split, dotted with apartment houses and schools, mushroomed. Big docks, warehouses, and factories lined a deep arm of the sea; ocean freighters rode at anchor in this landlocked harbor.

Ancient center of Split is the vast palace that Diocletian, soon to retire from governing the Roman world, built around A. D. 300. Twelve centuries ago a town grew up within its protecting walls, and a sizable part of the city's population still lives there. Houses honeycomb the thick walls and crowd every available space of this 9½-acre ghettolike city-within-a-city.

With local guides we threaded its labyrinth of alleylike streets, entered the cathedral that was Diocletian's mausoleum, climbed its Venetian-type tower, and visited a tiny chapel inside the north wall. Laundry hung from ancient arches, milling crowds walked pav-



ing stones laid 1,650 years ago, and darting urchins armed with homemade blowguns peppered victims with Split peas. A Friday odor of frying fish permeated the scene.

Later we explored the ruins of Salonae (modern Solin), Diocletian's birthplace, and toured near-by Trogir's famous cathedral.

At dusk we visited the sumptuous villa of Ivan Meštrović, Yugoslavia's renowned sculptor, now working and teaching in self-exile at Syracuse University in up-State New York. In its halls and spacious exhibition room we saw chiseled works of art ranging from a man on horseback, done by Meštrović when he was a poor shepherd boy, to colossal wooden figures left unfinished when he escaped to Switzerland during World War II. In the atelier we met Andrija Krstulović, former Meštrović pupil and husband of one of our guides, finishing a relief by candlelight.

Carved heads that ring St. Jacob's Cathedral in war-blasted Šibenik once inspired the youthful Meštrović. Jouncing past on the tortuous coast road, we stopped to admire these realistic portraits in stone of long-forgotten medieval citizens. Inside, young voices sang Mass and worshipers knelt in soft colored light from stained-glass windows.

After dark, our gas supply running out, we lost our way. Lights that resembled towns but appeared to be offshore compounded our confusion. Finally coasting into Crikvenica, our destination, we found they were the strong carbide lamps that Dalmatian fishing fleets use to lure big game within harpoon range.

For a day we forsook the shore to visit a famed Croatian beauty spot, the jewellike Plitvice Lakes (Jezera). Inland we followed a war-wracked valley to a wild and wooded gorge. There 16 crystal lakes cascaded, one into the next, in a watery stairway of haunting beauty.

On a rustic bridge we unexpectedly met M. Jacques Chartier, retiring French Minister to Albania, and his charming daughter. Together we roamed this natural wonderland and went to a new lakeside hotel for lunch. It had all the facilities, but its cupboard was bare. In its well-equipped kitchen we heated American canned soup, made French coffee, and shared each other's emergency rations.

North of Crikvenica we hit paved road; riding it felt like gliding. In lusty Rijeka, formerly Italian Fiume, our pass allowed us to roam the water front and take photographs.

Atop the harbor control building we watched this largest Yugoslav seaport in feverish action. Swarming, shouting stevedores loaded and unloaded horse-drawn carts beside deep-sea freighters, scurrying tugs crisscrossed the harbor, and giant cranes swung arcs in the

sky. In front of us *Zagreb*, one of a fleet of trim postwar merchant ships built in Rijeka, loaded rough-sawn lumber (page 157).

World War II almost completely destroyed this port; rebuilt, it has twice its prewar capacity. Revived trade with Western Europe and America since Tito's break with Stalin booms it. As we watched, the American Export Lines' *Estavia* docked, the Stars and Stripes fluttering from her mast.

Soon we left the Adriatic world behind and were in Slovenia's rolling hills. Thrifty farms, green pastures, and autumn-tinted forests replaced barren rock, palm trees, and blue sea.

In Postojna's huge limestone caverns, once known as the Adelsberger Grottoes, we hiked seven miles through a fantastic underworld kingdom of Pluto.

A rainbow arched Ljubljana when we reached this bustling capital of Slovenia. In many ways this city with the musical name is Yugoslavia's most up-to-date. When clanging trolleys, honking autos, and the noise of crowds hurrying to work awakened me next morning, I thought I was back in the States.

#### Industry Changed Ljubljana's Face

Heavy industry changed the face of this once quiet university and market town; in five years its prewar population has doubled. The big Litostroj factory, turning out turbines, steam boilers, and machinery, has 20,000 workers. Around this sprawling modern plant rises a new city of apartments, schools, stores, and theaters. New factories coming into use keep the industrial ball rolling.

With a local geography professor we did a Ljubljana roundup, visited the medieval part of town, cathedral, museum, factories, and the fast-growing university. We climbed the hill the city surrounds and walked the crumbling ramparts of its fortress castle.

"Some day we'll restore the castle," our guide said, "but factories come first."

New snow capped the towering Julian Alps when we drove to scenic Bled (page 169). In August, when Marshal Tito occupies the former King's lakeside villa and foreign embassies move to this delightful mountain town, Bled becomes the country's unofficial capital. We rested there over a quiet postseason week end.

Our visas, amended in Belgrade, allowed us to exit through skyscraping mountains via difficult Loibl Pass, nearest frontier post to Bled. As we approached the Austrian frontier, the road zigzagged up an almost sheer mountain wall. Its 32-percent grade proved too much for even our sturdy car; halfway up it stalled. I suggested Kurt try alone. Clutch smoking, motor roaring, it made the grade. I hiked the last mile out of Yugoslavia.

# American Processional: History on Canvas

BY JOHN AND BLANCHE LEEPER

ON November 22, 1800, President John Adams welcomed to Washington, D. C., the Houses of Congress assembled for the first time in that "palace in the wilderness," the new United States Capitol. One hundred and fifty years later the Nation observed the Capital City's anniversary.

The National Capital Sesquicentennial Commission, which planned the celebration, commissioned The Corcoran Gallery of Art, a privately endowed museum in Washington, to borrow and exhibit a series of historical paintings, drawings, and prints illustrating the country's growth.

This collection, entitled "American Processional," was designed to encompass the years between 1492 and 1900, and to include political, economic, cultural, and social developments. Every picture had to show an important and unique phase of the American story.

## Two Continents Searched for Art

We of the Corcoran staff felt we needed two years to prepare an exhibition of such magnitude. Instead, we had six months. Within that interval many problems had to be mastered. The mere transporting and assembling of 311 pictures seemed the least of many obstacles to be surmounted.

Selection of material to be invited was a serious concern. The preliminary search was made by a group of staff researchers who documented each picture considered—thousands in all.

Then staff members, headed by Director Hermann W. Williams, Jr., made exploratory trips. They went to London, Windsor Castle, and Dublin; to The Hague and Amsterdam; to Paris and Versailles. They searched Montreal and Mexico City. They covered every important art center in the United States, and some that were not so well known. They dug up material long neglected, much of it never shown before to the public.

It was agreed that pictures had to be first-hand reporting wherever possible. One might think this a self-evident provision, but historical painting as an art form is not invariably a dependable record of actual events. Romantic artists too often used their imaginations without regard to facts.

American Processional was resolved to stress accuracy above artistic quality. If professional painters had not portrayed a given incident, then we turned to soldiers, travelers, house painters, and primitive artists.

Primitive painters, as historians of their times, made up in vigor and authenticity what they lacked in skill.

Many were accurate eyewitnesses to events, seemingly trivial at the time, which recorded America's growth.

Today the study and collection of folk paintings is a serious pursuit among art historians. For three examples:

Kemmelmeyer's Washington (page 183) is more exciting pictorially than Trumbull's Cornwallis (page 187), and is probably a more authentic record.

It is characteristic of primitive works all over the world that relative importance is indicated by size. Thus Kemmelmeyer's Washington and merry-go-round steed dwarf the other figures.

An anonymous artist's "Schoolroom," as humorous as a chapter from Mark Twain, gives insight into the methods of early 19th-century education (page 191).

Linton Park's "Flax-scutching Bee" shows country people taking advantage of their host's hospitality to begin a hilarious party (page 193).

After weeks of preliminary study the research staff gathered to inspect the photographs of some 3,000 entries and choose the first pictures for invitation.

To see that each vital historical development was represented, it was necessary to name an alternate to almost every picture invited. The mere existence of a painting did not mean it was available for loan. Many institutions restricted lending; others had already committed their pictures. Occasionally a desired painting was too fragile or too large for moving.

## One Picture Too Big for Door

When Thomas Eakins's colossal "Agnew Clinic" arrived, it was too large to go through the service doors and into the freight elevators. Traffic within the museum was suspended as the painting was carried through the front entrance.

Before it reached its destination, a door and its frame had to be removed (page 174).

Galleries had to be redecorated; the plaster in some was scarcely dry when the show opened July 8, 1950.

While the exhibition was intended to stress scenes of action, the portraits of a few key figures could not be overlooked; they were invaluable in indicating the temper of their times.



### A Surgeon Visiting the Corcoran Gallery Sees Himself as a Medical Student 62 Years Ago

Brig. Gen. Frank Royer Keefer, who retired in 1929 as the Army's Assistant Surgeon General, posed for Thomas Eakins when "The Agnew Clinic" was painted in 1889. Three University of Pennsylvania Medical School classes commissioned the artist to honor white-haired Dr. D. Hayes Agnew (left), a famous surgeon and anatomist, who here lectures as he directs the operation. General Keefer, today 85 years old, was the young man immediately above the bearded student (right). The artist himself (bearded, glasses) was painted in by his wife in the upper center. Four men shown in the painting survive. Eakins's masterpiece was a loan to the American Processional from the university at which it was painted.

A portrait of George Washington was essential. Charles Willson Peale's 1776 version was chosen in preference to one of the later and more familiar Gilbert Stuart versions because it was the first to show the future President uniformed as Commander in Chief of the Continental Army (page 181). Also, it was the second Washington portrait done from life.

Peale's "Benjamin Franklin" represents the philosopher, statesman, diplomat, and scientist—the sturdy American version of the cultivated man of the 18th century (page 185).

John Singleton Copley's "Jacob Fowle" symbolizes the elegant civilian manly enough to defend his ideals with a musket (page 184).

There was a temptation to overemphasize military events, but cultural progress and technological changes clamored for attention.

#### Benjamin West, the "American Raphael"

As one antidote to too much militarism, we borrowed Benjamin West's "William Penn's Treaty with the Indians," a painting about a

Quaker by a Quaker (pages 179 and 182).

If any artist deserves to be called the father of American painting, it was West. West, the son of a Pennsylvania tavern keeper, was not only the first American to study art in Italy; he himself taught many other Americans abroad. If his students were impoverished, he generously assisted them with loans or lodgings. Copley, Peale, Thomas Sully, and many others came knocking at West's London studio.

As a youth already acclaimed in the Colonies, West went to Rome to study the Old Masters; Italians immediately hailed him as the "American Raphael."

Even during the Revolutionary War the American-born West was a power in London. His reputation and rewards eclipsed those of Reynolds, Gainsborough, and Romney. As George III's court painter, West could do no wrong, even when he sympathized with the Revolutionists. With the King's blessing he helped organize Britain's Royal Academy, and

he became its second president, serving 27 years.

In historical painting West made a daring innovation with his "Death of Wolfe." Previously it had been the convention to represent British heroes in Roman togas and sandals, but West chose to depict them in contemporary dress. But for him Wolfe would have died on the Plains of Abraham in classic garb instead of his own scarlet uniform.

### West Boldly Upsets Art Fashions

According to Henry Tuckerman, the multitude "acknowledged [the painting's] excellence at once; but the lovers of old art—called classical—complained of the barbarism of boots, buttons, and blunderbusses, and cried out for naked warriors, with bows, bucklers, and battering-rams."

West followed up with "Penn's Treaty," showing the founder of his native Pennsylvania bargaining for land with the Delawares beneath the venerable Treaty Elm. Voltaire called Penn's compact the only one "never sworn to and never broken."

West must have taken delight in picturing Penn, not as a contrived Roman but as a Quaker, a man of his own faith. In Europe the artist loved to show off his Quaker hat. Upon being elected president of the Royal Academy, he told the members, "I shall presume in the future to wear my hat in this assembly."

In the artist's old age Lord Byron criticized him as the "dotard West, Europe's worst daub, poor England's best"; but the public supported West handsomely.

### One-eyed Trumbull Paints the Revolution

One of West's beneficiaries was John Trumbull, to whom Americans owe so great a debt for depicting their country's history.

As Trumbull never achieved much financial success, Thomas



### Wall Street Still Looks at Trinity Church, as It Did in 1857

Compare the photographer's view with the painters' (page 196). Will the next 94 years bring as great a change? Cavernous Wall Street, financial heart of the Nation, is literally walled by skyscrapers, but it owes its name, not to these, but to the lesser wall which Gov. Peter Stuyvesant ordered built in 1653 to protect New Amsterdam's northern limit. Trinity Church, overhanging Broadway, stands on onetime farmland which Queen Anne granted to the parish in 1705. Alexander Hamilton, Robert Fulton, and Capt. James Lawrence lie in its churchyard. On its sun-warmed benches workers from shadow-bound Wall Street love to relax during lunch hours.



### A Life-size, Hand-cranked Ancestor of the Movie Was "Panorama of the Sioux War"

In 1862 an Indian war party raided settlers at Lake Shetek, Minnesota. John Stevens, a sign painter, depicted the bloodcurdling story on panels of a 260-foot roll of canvas. When these panels were unreeled under light, like a film, they produced an illusion of motion. Stevens, going on tour, showed his art to crossroads audiences at 50 cents a head. Two of his four panoramas survive. This one was lent, together with its hand-turned machinery, to American Processional by the Minnesota Historical Society. Author John Leeper here reads Stevens's own "beautiful oratorical explanation" to an audience in the Corcoran Gallery.

Jefferson offered him a secretaryship. The artist, refusing, replied that he was "fully sensible that [my] profession is frivolous, little useful to society, and unworthy . . . [but] the greatest motive I had or have for engaging in . . . painting has been the wish of commemorating the great events of our country's Revolution."

In that desire Trumbull succeeded; he became the foremost painter of the Revolution. Generations of Americans have seen the war through Trumbull's one good eye (an injury cost him the sight of the other). Four of his large canvases adorn the rotunda of the United States Capitol.

Trumbull did not paint the war through hearsay. Like Peale, he participated. General Washington was so impressed by Trumbull's skill in sketching certain British gun emplacements that he made him his aide.

While the war was still going on, young Trumbull forsook his Army commission and, armed with a letter from Franklin, sought out West in London. He was just beginning his studies when the British arrested and banished him, apparently in retaliation for the execution of Maj. John André in America as a spy.

Later Trumbull returned to West's London studio and there turned out a succession of American paintings, including a "Surrender of Cornwallis" (page 187). This painting, which shows the British marching between the victorious French and Americans, is much smaller than the rotunda's heroic "Cornwallis."

### Garneray Preferred Sea to Studio

THE NATIONAL GEOGRAPHIC'S series represents the War of 1812 with "The Battle of Lake Erie" (page 189). This American victory, which drove the British from the Great Lakes, is remembered chiefly for Capt. Oliver Hazard Perry's terse report, "We have met the enemy and they are ours."

Ambroise Louis Garneray, portrayer of the scene, was a Frenchman who as a boy of 13 gave up art study to follow the sea. Captured by the British in 1806, he was held captive nine years. He therefore could never have glimpsed the battle on Erie; in fact, he seems never to have seen America. Garneray, then, was not one of our "eyewitness" artists.

Eventually returning to art, the Frenchman remained the experienced sailor, mindful of every nautical detail.

Nearly half a century of relatively unbroken peace followed the War of 1812. During this interval Americans moved westward and expanded their trade overseas.

The portrait of John James Audubon, the naturalist, is a clue to the increasing tempo of the move westward (page 191). He was painted by his two sons, both capable artists, who assisted their father in his studies.

William Hahn's "Yosemite Valley" (page 204) and Frederic Remington's "Fight for the Water Hole" (page 209) represent later phases of the western adventure.

America's overseas expansion is illustrated by J. G. Evans's picture of Commodore Perry's fleet on its way to Japan in 1853 (page 195). The Japanese were completely fascinated by the Americans and everything they carried with them. Popular Japanese wood-block prints of the time depict Occidentals with Oriental features.

#### When the *America* Won the Cup

Paintings representing American sport were among the most satisfying in the exhibition. Thomas Eakins's "The Fairman Rogers Four-in-Hand" alone is proof of the masterly and affectionate attention that sports subjects received from our artists (page 210).

James E. Butterworth's yacht picture breathes the very spirit of elegance and grace (page 194). This picture was invited under the title, "The Yacht *America* Leaving Boston Harbor for England" (1851). Investigation, however, indicates that the yacht was not the *America* and the harbor was not Boston. The original title seems to have been lost. Butterworth, however, did paint the *America* in her heyday; and this seems like a good time to tell her story.

A syndicate of New York sportsmen, accepting a British racing challenge, built the yacht along the lines of a New York pilot boat. On June 21, 1851, *America*, stowing her racing gear below and using borrowed sail, set out from New York, the first yacht to cross the Atlantic to engage in an international contest.

On August 22 she lined up against Britain's best at Cowes for the difficult race around the Isle of Wight. *America*, showing her stern to 14 rivals, finished 18 minutes ahead of the nearest contender. She brought back to the United States a trophy known ever since as the *America's* Cup.

In 1857 her owners gave the prize to the New York Yacht Club as a perpetual international challenge cup. Americans, defending it more than a dozen times—five times against Sir Thomas Lipton—never allowed it to leave their shores.

The *America* is no more. She met an inglorious end at Annapolis, Maryland, on Palm Sunday, 1942. She was cradled on a marine railway, undergoing repairs, when heavy snow crushed a roof above her and split the yacht from bow to stern.

#### Bingham Painted Politics

Far too often political paintings illustrate statesmen gathered in solemn, dreary conclave. The treasured paintings of George Caleb Bingham are fortunate exceptions. American Processional was enriched by two of his political canvases, one of them his droll and sentimental "County Election" (p. 192).

Virginia-born Bingham became known as the "Missouri artist." During his life his realistic studies enjoyed a vogue, but when he died in 1879 his fame flickered everywhere save in Missouri.

A Bingham revival began about 1910. Now each succeeding year brings him increasing respect.

"County Election," with its more than 60 figures, took Bingham three months to paint. To describe it, we cannot do better than quote the *Missouri Statesman* reporter, who, having visited the artist's studio, wrote on October 31, 1851:

"Several hours would not suffice fully to examine it, so numerous and lifelike are the characters . . . some engaged in earnest conversation, some drinking at a cake and liquor stand . . ."

#### Civil War Shows Art's Evolution

The NATIONAL GEOGRAPHIC's Civil War selections illustrate the evolution of American historical painting since the Revolution. To the 1776 artist, war was a sequence of colorful and dramatic, often theatrical, episodes. Winslow Homer's 1865 canvas, "Pitching Quoits," on the other hand, looks on war as a human experience (page 201).

Homer, who eloquently painted the North's wartime story, had a southern counterpart in Conrad Wise Chapman.

Young Chapman, the son of an artist, was studying art in Rome when war broke out in 1861. Hurrying home, he enlisted in the Confederate States Army. Severely wounded at Shiloh, he was transferred to Charleston, South Carolina. There in 1863, at the request of the Confederate Government, he sketched the harbor defenses, and from these he later painted 31 oils.

Chapman's "Confederate Submarine Torpedo Boat *H. L. Hunley*" (page 199) appears less dramatic than C. Riess's *Monitor-Merrimac* battle (page 203), but in 1863 the



Evening Star

### Coreoran Gallery Unwraps a Loan from King George VI

"Naval Engagement on Lake Champlain" was painted by Henry Gilder, a British eyewitness to the 1776 battle. Hermann Warner Williams, Jr. (center), the Coreoran's director, selected the picture from the Windsor Castle collection. Sir Oliver Franks (right), the British Ambassador, presents it. Robert V. Fleming, the National Geographic Society's Treasurer, accepts on behalf of the Sesquicentennial Commission. France, Ireland, the Netherlands, Canada, and Mexico likewise contributed to the exhibition.

*Hunley's* exploit still lay ahead. By the following year she had achieved a record for heroism scarcely equaled in naval history.

Designed by Horace L. Hunley, the cigar-shaped, metal-plated boat was built at Mobile, Alabama. Details are scarce and conflicting, but she seems to have been some 30 feet long and 5 feet deep, and contained air enough to last a submerged crew half an hour. Lacking an engine, she was driven by eight men who, seated face to face, knees drawn up to chins, laboriously turned the propeller shaft.

These men could not have hoped to live.

Their armament, a torpedo, was locked to a spar riding in front of the boat (shown in painting) and it was fired by ramming.

First at Mobile, later at Charleston, the *Hunley* sank on test runs and from accidents, drowning members of her crew. Each disaster found fresh, undaunted volunteers to man her.

After the fifth sinking she no longer dared to dive.

On February 17, 1864, the *Hunley* silently stole out and nudged the sloop-of-war *Housatonic*, a unit of the Federal Fleet blockading Charleston and Fort Sumter. The torpedo exploded; the shattered *Housatonic* sank. Down to death plunged the *Hunley*, the first submarine to sink an enemy warship in time of war.\*

Some 40 brave men gave their lives to inventor Hunley's metal coffin, but she operated in such secrecy that only 16 have been identified. Her story calls to mind Japan's one-man suicide subs of World War II.

Nearly everybody knows Abner Doubleday as the traditional

father of baseball, but it is not so widely known that he fired Fort Sumter's first shot in reply to the Confederate bombardment.

### Doubleday, Ballplayer and General

At the head of his army, General Doubleday crossed the Potomac in June, 1863, on his way to Gettysburg (page 200). Gettysburg, a Union victory, was a bitter personal disappointment to Doubleday (not shown in paint-

\* See "Charleston: Where Mellow Past and Present Meet," by Du Bose Heyward, NATIONAL GEOGRAPHIC MAGAZINE, March, 1939.



National Geographic Photographer Willard H. Curtis

### School Children Learn History the Vivid Way by Touring American Processional

Boys and girls stood popeyed before a realistic painting of a sea captains' carousel, but interest visibly wandered from "William Penn's Treaty with the Indians" (page 182). The Corcoran's Charles E. Buckley, who serves as their guide, thinks they sensed a fictitious quality about the picture, which Benjamin West created from imagination in London (page 175). Civil War memories still seemed fresh, Mr. Buckley noted. "I recall my father's telling me about this," more than one visitor told him upon seeing a painting of that era.

ing). As a division commander temporarily but efficiently leading a corps, he felt he had earned promotion, but he was overlooked.

David G. Blythe, the artist, accompanied the 13th Pennsylvania Regiment, sketching its activities. His painting, appropriately, was lent by the National Baseball Hall of Fame and Museum, Cooperstown, New York.

It was in Cooperstown, as a ball-playing schoolboy, that Doubleday earned credit for laying out the diamond, assigning the playing positions, and naming the game.

One of the major pictures to come out of the Civil War was "The Peacemakers" (page 202). Americans are indebted to its creator,

Boston-born, self-taught George Peter Alexander Healy, for his lifelike gallery of great men and ladies on both sides of the Atlantic.

#### Kings and Presidents Sat for Healy

King Louis Philippe of France, King Charles of Romania, and Prince Otto von Bismarck of Germany posed for Healy. So did Jenny Lind, Henry W. Longfellow, and Franz Liszt.

The artist portrayed Charles Goodyear on the inventor's own creation, rubber.

From life, Healy painted portraits of eleven American Presidents, nine of which hang in the Corcoran Gallery.



Among Confederate leaders, Healy gave us General Beauregard, painted before the war, and Robert E. Lee, painted after death.

The artist was in Charleston April 12, 1861, when war broke out at Fort Sumter. As "that Yankee painter," he was invited to leave town.

The war was ended, and Lincoln was dead, when the artist outlined to Gen. William T. Sherman his plan to commemorate the President's famous meeting with Generals Grant and Sherman and Rear Adm. David D. Porter aboard the steamer *River Queen* at City Point, Virginia, in March, 1865. At that time the Confederacy was tottering, and Lincoln wanted to make sure that his generals established the peace quickly.

Healy knew his subjects well, having painted them from life (Sherman four times), but he wished to establish the background for a "true historical picture." He therefore wrote, asking details, to Sherman, who replied, January 13, 1868, in part:

"In March, 1865, I concluded to go in person to City Point, Virginia, to see General Grant . . . Mr. Lincoln . . . was . . . in the steamer *River Queen* . . . I had not seen him since 1861 . . . At first he looked haggard and careworn. I understood he had come down the Bay from Washington to escape the cares and harassments of political life. As we engaged in conversation, he warmed up and looked more like himself. We did not sit at a table, nor do I recall . . . any maps or papers. We merely sat at ease . . ." (Here Sherman sketched the cabin plan).

Healy appears to have started his painting in Washington and to have finished it in Rome. His daughter Edith wrote in her diary, Rome, October 9, 1868:

"Papa . . . is painting on his small picture of Lincoln, Sherman, Grant, and Porter; he thinks of calling it 'The Peacemakers' and showing a rainbow out of the ship's window."

Healy painted a larger version. While on loan to the Calumet Club in Chicago, it was destroyed by fire in 1892.

The White House preserves the smaller painting, from which the NATIONAL GEOGRAPHIC'S reproduction was made.

"The Last Moments of John Brown" shows the Civil War, as yet undeclared, gathering fire in 1859 (page 197).

"The Olivier Plantation," an 1861 water color, depicts one of those ante-bellum southern mansions so famed for their elegance, hospitality, and good living (page 198). Raids, battles, fire, and bankruptcy left not many Dixie estates like it.

The Olivier Plantation, so called for its owners, three Olivier brothers, stood four miles east of New Iberia, Louisiana. It was destroyed by fire so long ago that not many people remember having seen it.

Adrian Persac, who painted the plantation, was known as a chart maker and commercial artist. Instead of painting figures into his composition, he cut them out of magazines, pasted them into this delicate landscape, and painted over them. Close examination of the original water color reveals his adroit work.

#### Cable's Words Flash Beneath Atlantic

Industrial growth followed the Civil War.

"Splicing the Cable" shows one of the technological advances that transformed a pre-vaillingly agricultural society (page 207).

This 2,800-mile armored copper wire, the first successful transatlantic cable, made communication virtually instantaneous between America and Europe.

Despite failures in 1857, 1858, and 1865, the new cable was laid between Valentia, Ireland, and Heart's Content, Newfoundland, in 1866. Rain was falling July 13 when the cable ship *Great Eastern*, standing off Ireland, made the splice and dropped the wire into 100 fathoms.

Artist Robert Dudley, aboard the ship, depicted the gloomy scene in oil. In 1892 his picture was given to the Metropolitan Museum of Art, New York, by Cyrus West Field, the cable's American promoter, whose faith and energy in the face of heartbreaking setbacks turned "folly" into success.

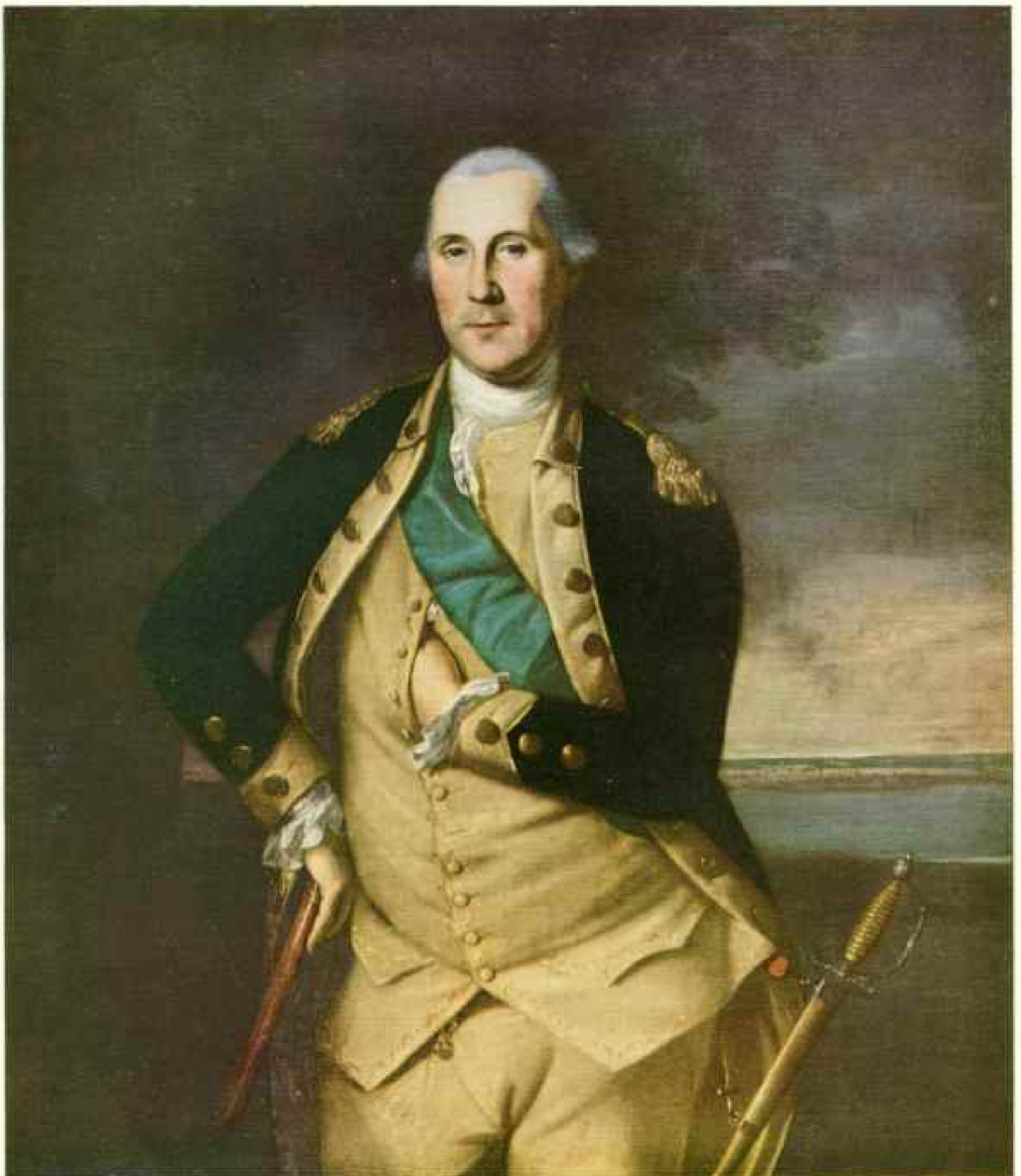
Surely no one has ever prepared any sort of comprehensive story of America without feeling a deep sense of regret over his many omissions and the inadequacy of the final picture.

In truth, the American story is too varied, too profound, too tragic, too high-spirited ever to be adequately reported in an art survey. American Processional could not tell everything, but it added new light to our national history.

---

#### INDEX FOR JULY-DECEMBER, 1950, VOLUME READY

Index for Volume XCVIII (July-December, 1950) of the NATIONAL GEOGRAPHIC MAGAZINE will be mailed upon request to members who bind their copies as works of reference.



© National Geographic Society

181

Painted by Benjamin Munnick

CHARLES WILLSON PEALE (1741-1827) • *George Washington*

With this portrait the National Geographic Society introduces 33 of a series of paintings exhibited by the Corcoran Gallery of Art to commemorate the 150th anniversary of Washington, D. C., as the National Capital. These works, some of them primitive folk art never before shown in public, depict the American story from colonial times to the 20th century.

Not a superlative artist but a great and fantastic American was Charles Willson Peale, portraitist, inventor, naturalist, soldier, and hero of the Philadelphia yellow-fever epidemic. In versatility and patriotic devotion he rivaled his illustrious model (above), but debts and visionary schemes plagued most of his life.

Peale abhorred violence, yet he enlisted in the Revolutionary militia as a private. Rising to captain, he devoted himself to feeding and comforting his weary men. At Washington's side he endured Valley Forge's cold, misery, and starvation, and there he portrayed some 40 officers. As a fellow veteran remarked, Peale "lit and pointed and painted and lit."

Peale painted Washington from life 14 times, a record matched by no other artist. Called to Mount Vernon in 1772, he executed the first Washington portrait, showing him as a Virginia colonel. Our painting, done in 1776 for John Hancock, portrays Washington for the first time as an American; he wears the Commander in Chief's blue sash.





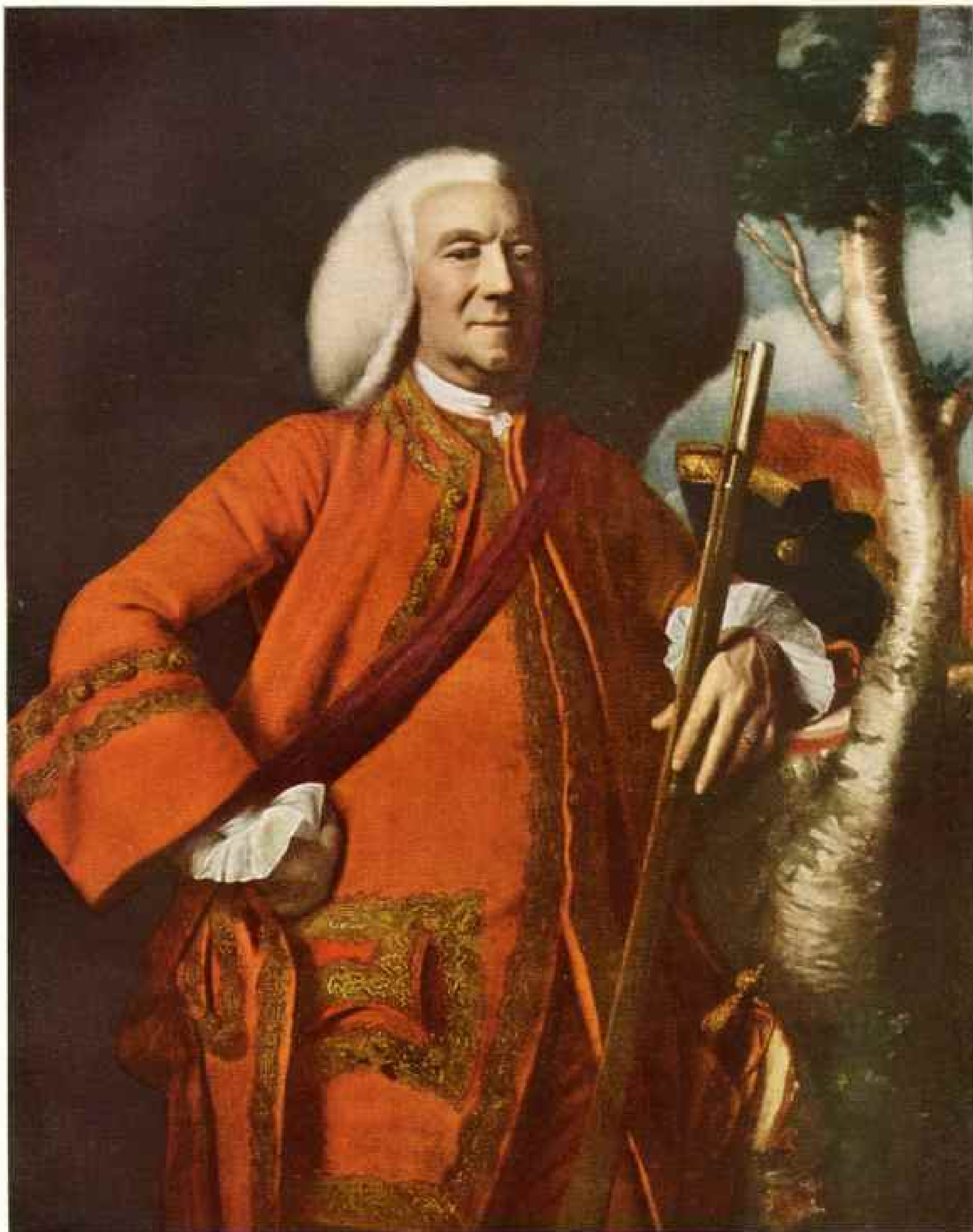
© National Geographic Society

183

lent by Col. and Mrs. Edgar W. Garbisch

**FREDERICK KEMMELMEYER • General George Washington Reviewing the Western Army at Fort Cumberland**

Maryland troops were called out in 1794 to put down the Whiskey Rebellion. Pennsylvania farmer distillers were rioting against a Federal liquor tax, and President Washington was determined to enforce the law. The artist, sketching him at the review, thrice painted the scene in oils.



JOHN SINGLETON COPLEY (1737?-1815) • *Jacob Fowle*

Violence-hating Copley, a Whig married into the Tory gentry, tried to stop the Boston Tea Party and the American Revolution. Failing, he moved to London, never to return. There he grew rich but homesick. One day, on hearing the King acknowledge American independence, Copley rushed home to his studio and boldly painted the Stars and Stripes—"the first American flag hoisted in England," a witness remarked.

Copley abroad acquired learning but lost originality. In his enlattered, crotchety age he concluded that his "crude" American works were superior, but he could no longer duplicate them. He painted Col. Jacob Fowle, Marblehead merchant and militia leader, about 1765.



© National Geographic Society

185

Gift of Historical Society of Pennsylvania

CHARLES WILLSON PEALE • Benjamin Franklin

Peale was about 27 and Franklin 61 when they met in London in 1767. Lacking introduction, Peale called alone at the philosopher's house, gave his name to a servant, and was shown upstairs. There, says his journal, he found Franklin, a young lady on his knee. Peale had time to sketch the pair before his presence was noticed. Then the Doctor complacently put the girl aside, welcomed his caller, and showed him his latest progress in electrical research.

Later Franklin gave Peale a rare but dead Angora cat for his museum (page 188).

Peale named a son for Franklin. Two decades after London the artist painted his subject, together with his lightning rods and zigzag lightning.



© National Geographic Society

116

**DOMINIQUE SERRES (1772-95) • Forcing the Hudson River Passage**

Manhattan's Fort Washington (right) and New Jersey's Fort Lee dominated the Hudson, but British warships, sticking to midstream, ran past their fire, as here Phoenix, Roulbrecq, and Tartar do October 9, 1776. The fall of both forts a month later drove the American Army into melancholy retreat. Artist Serres, originally a French sea captain, was captured in 1752 and taken to England. There he became George III's marine painter. His Hudson appears unrecognizably narrow. Today's view would show the George Washington Bridge.

Lent by United States Naval Academy Museum



© National Geographic Society

187

JOHN TRUMBULL (1756-1843) • *The Surrender of Cornwallis* (October 19, 1781)

Art by WILLIAM APULFON ABBE



CHARLES WILLSON  
PEALE

### Exhumation of the Mastodon

In 1786 Peale made his house "a repository of natural curiosities," America's first important museum. With purse and pen he collected a Noah's ark of stuffed animals.

In 1801 Peale learned about the discovery near Newburgh, New York, of a mastodon, an extinct elephantlike mammal. The owner, digging in a meadow, had uncovered only a few bones when a carpenter lashed work for \$300 and a gun. Peale bought bones and digging rights. To carry off the water, he created a huge wheel driving a chain of buckets. Spectators powered the wheel by walking within, like squirrels.

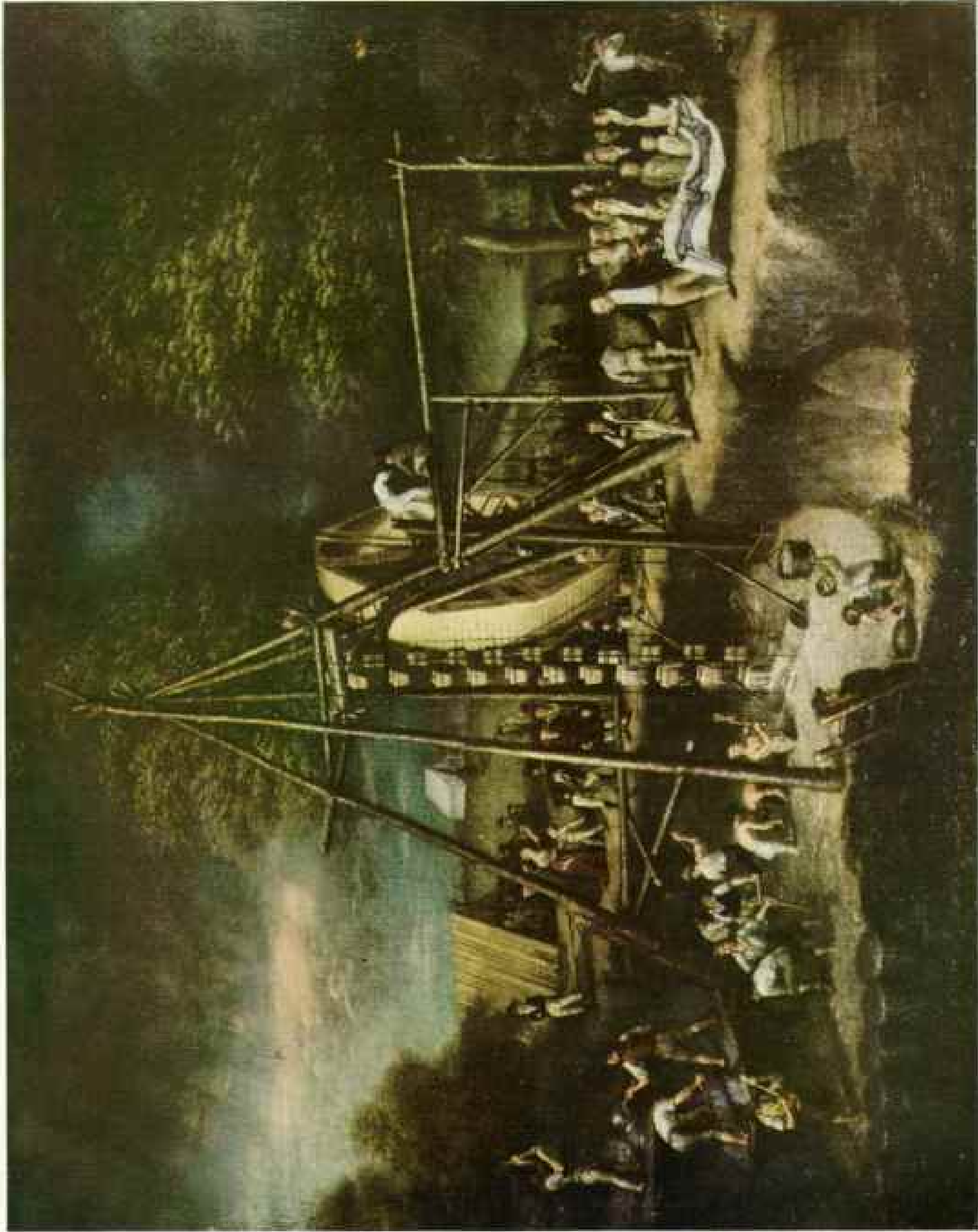
Cave-ins stopped operations before all bones were recovered, but Peale dug up a second set. Making casts of missing parts, he mounted two skeletons. These gave modern men a first look at the fabulous beasts.

Peale in 1807 painted the record of his search. In it he placed himself (holding scroll, hand extended); two of his wives; relatives; and friends, some not actually present.

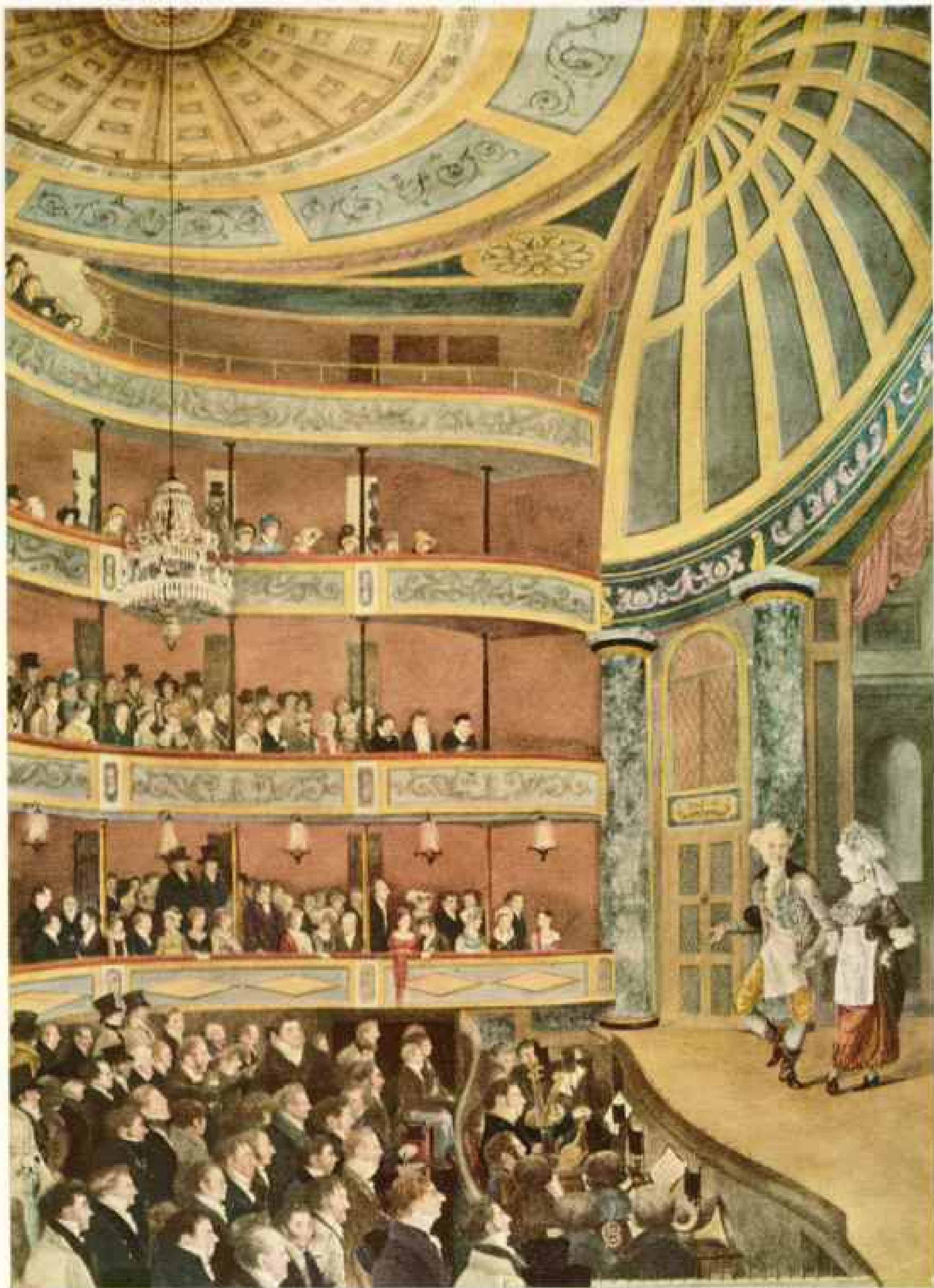
P. T. Barron bought one skeleton, but fire destroyed it. The second was dismantled in New York. A second Peale Museum, founded in 1814, carries on in Baltimore.

© National Geographic Society

Left by Peale Museum







© National Geographic Society

190

Lent by New York Historical Society

JOHN SEARLE • Interior of the Park Theater, New York City (1822)

Said the *New York Post* of November 8, 1822: "Last evening Mr. (Charles) Mathews (from England) made his first appearance before the New York audience. . . . it was not in our power to be present, but trusting to report we may say that such a first appearance was never witnessed here. The house overflowed so much and so early that the manager was called forward at half past six and entreated to order the doors of the pit to be shut against any further entrance, which was accordingly done."



© National Geographic Society

Lent by American Museum of Natural History

JOHN and VICTOR AUDUBON • *Audubon the Naturalist* (painted about 1841 by his sons)



© National Geographic Society

191

Lent by Knoedler and Company, New York

UNKNOWN ARTIST • *The Schoolroom*

How this painter must have hated country school! Later he forgot the drudgery and fondly recalled his sly, snickering classmates, who harassed teacher with whispers, spitballs, and pretended innocence. The beaten palm manfully borne was a medal for courage: the whisper, a confession of defeat. Teacher, to survive, had to rule like a lion. Primitive but realistic folk artists often told backwoods America's story better than academy-trained painters.





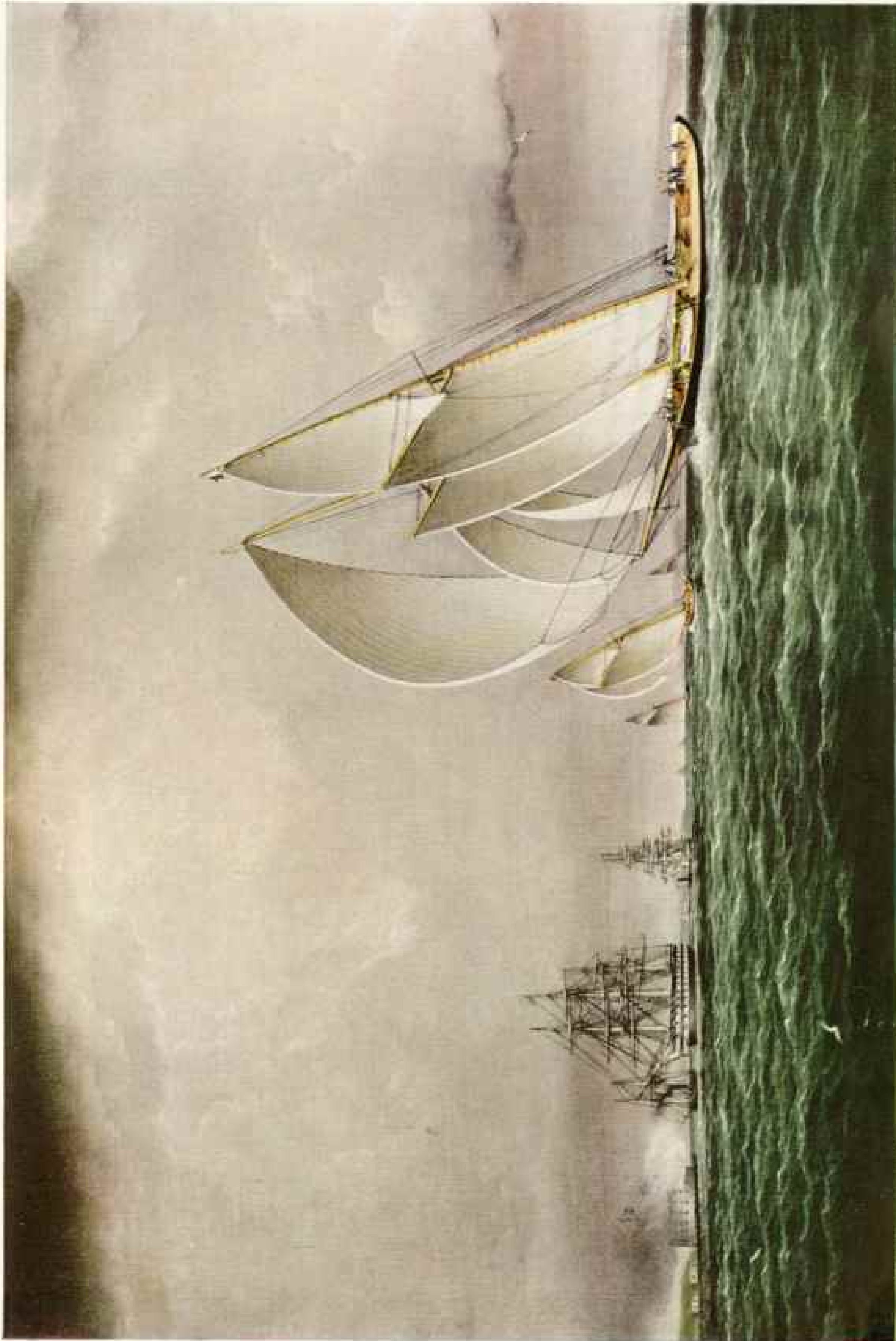
© National Geographic Society

193

### LINTON PARK • Flax-scutching Bee

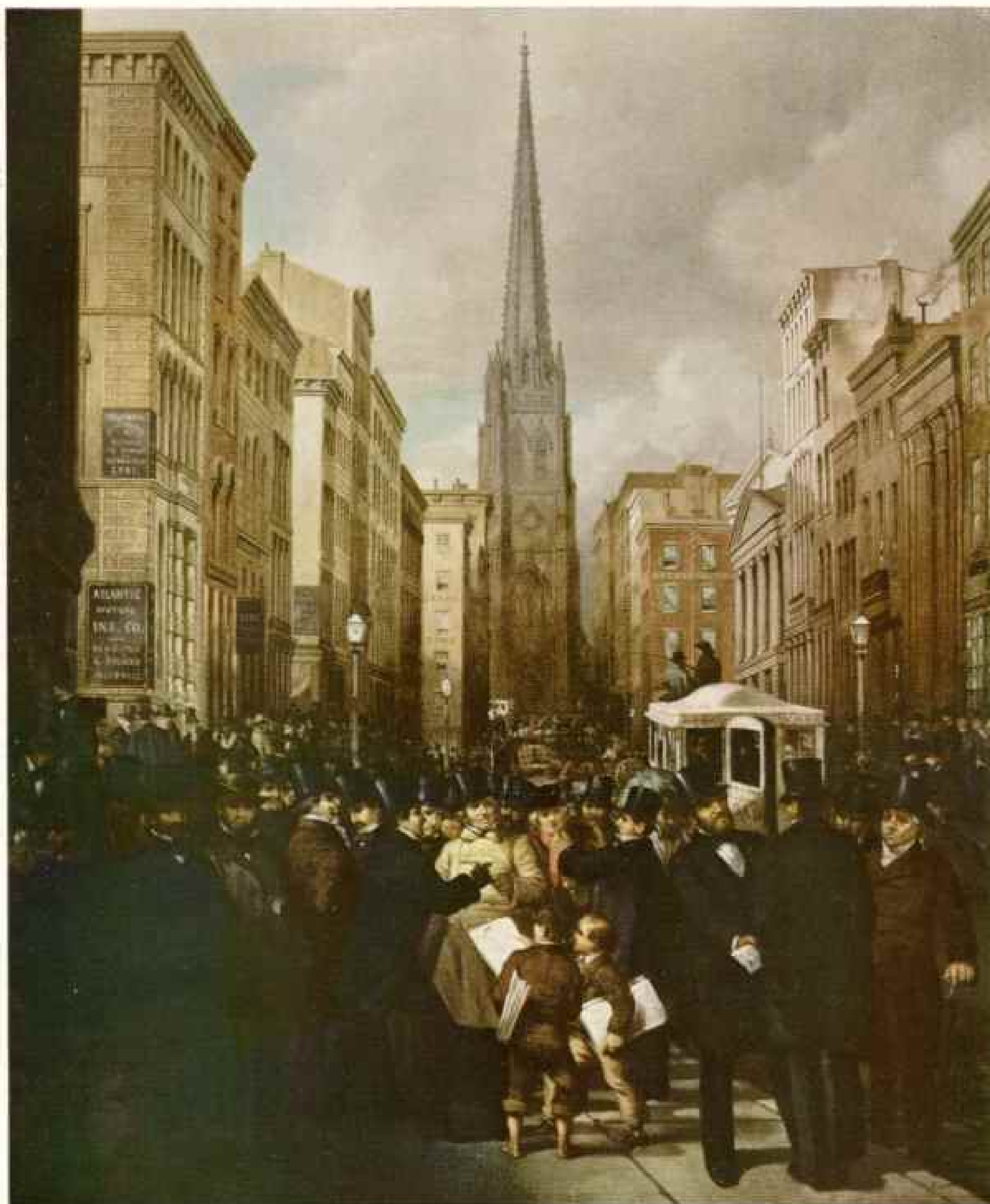
A naive folk artist around 1870 transferred the scene to mittens picking. Settlers, making sport of work, helped a neighbor scutch, or dress, his flax. Using wooden paddles, they beat the fiber over sharpened boards to remove woody elements. A flax break (left) chopped retted stalks dried over flames.

Lent by Col. and Mrs. Edgar W. Garbisch









© National Geographic Society

106

Lent by Museum of the City of New York

*JAMES H. CAFFERTY and CHARLES G. ROSENBERG • Wall Street, October 13, 1857*

In 1857 a violent era of expansion was slowing down. October 13 witnessed the final, stunning crash, the suspension of every New York bank.

October 14's *Times* reported: "Wall Street yesterday presented a remarkable appearance. The entire street . . . was densely packed . . . Bank presidents were jostled by policemen . . . The public that had anything in a bank seemed to have come to the simultaneous determination to draw it out in gold. There must have been four or five millions (withdrawn) . . . Men were rushing about, either with their hands full of gold coin, or with bags full . . ." After the close of business the Street appeared deserted. By 1858 the panic passed away.

Trinity Church here stands on Broadway, facing Wall Street.



© National Geographic Society

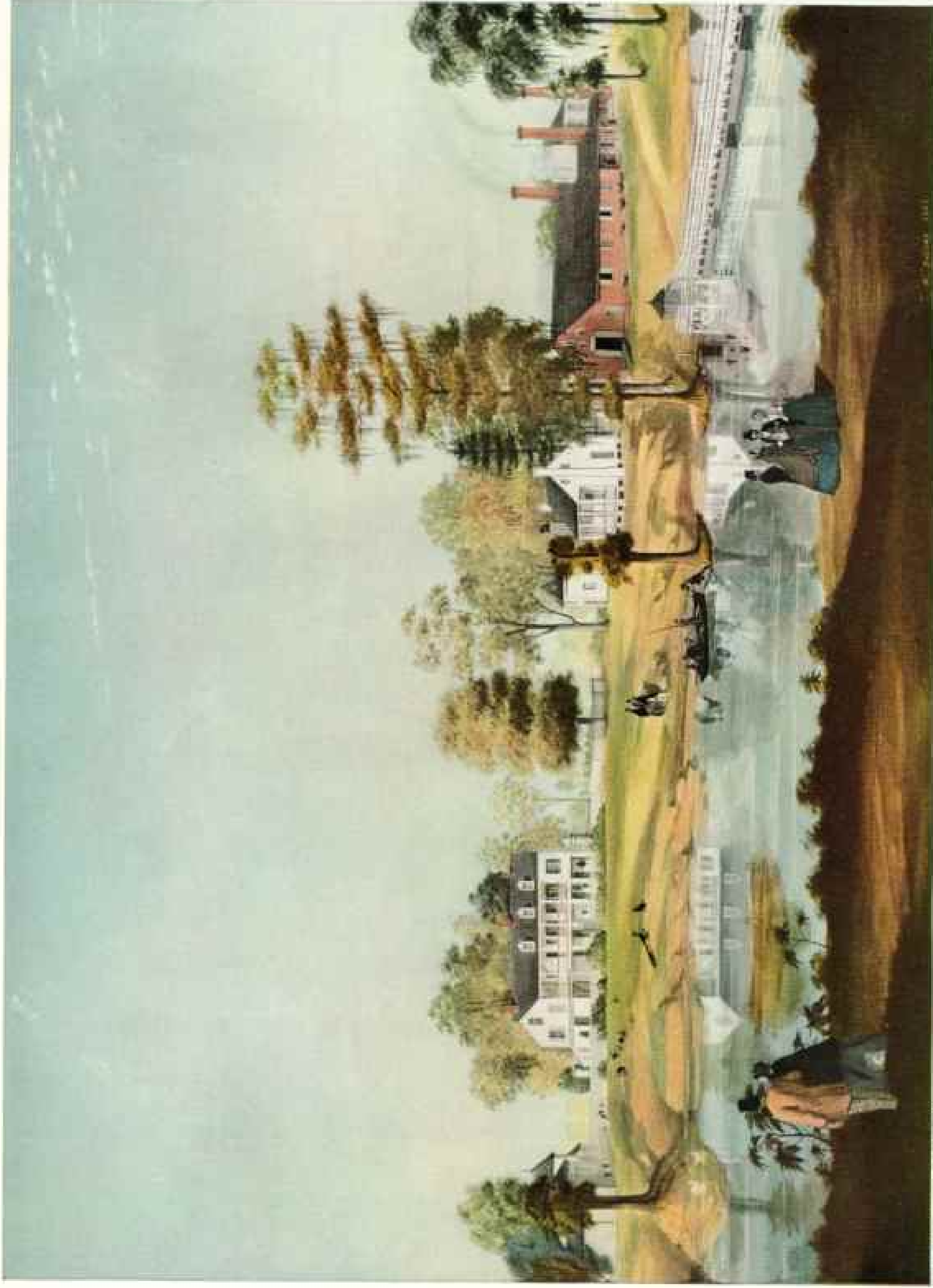
197

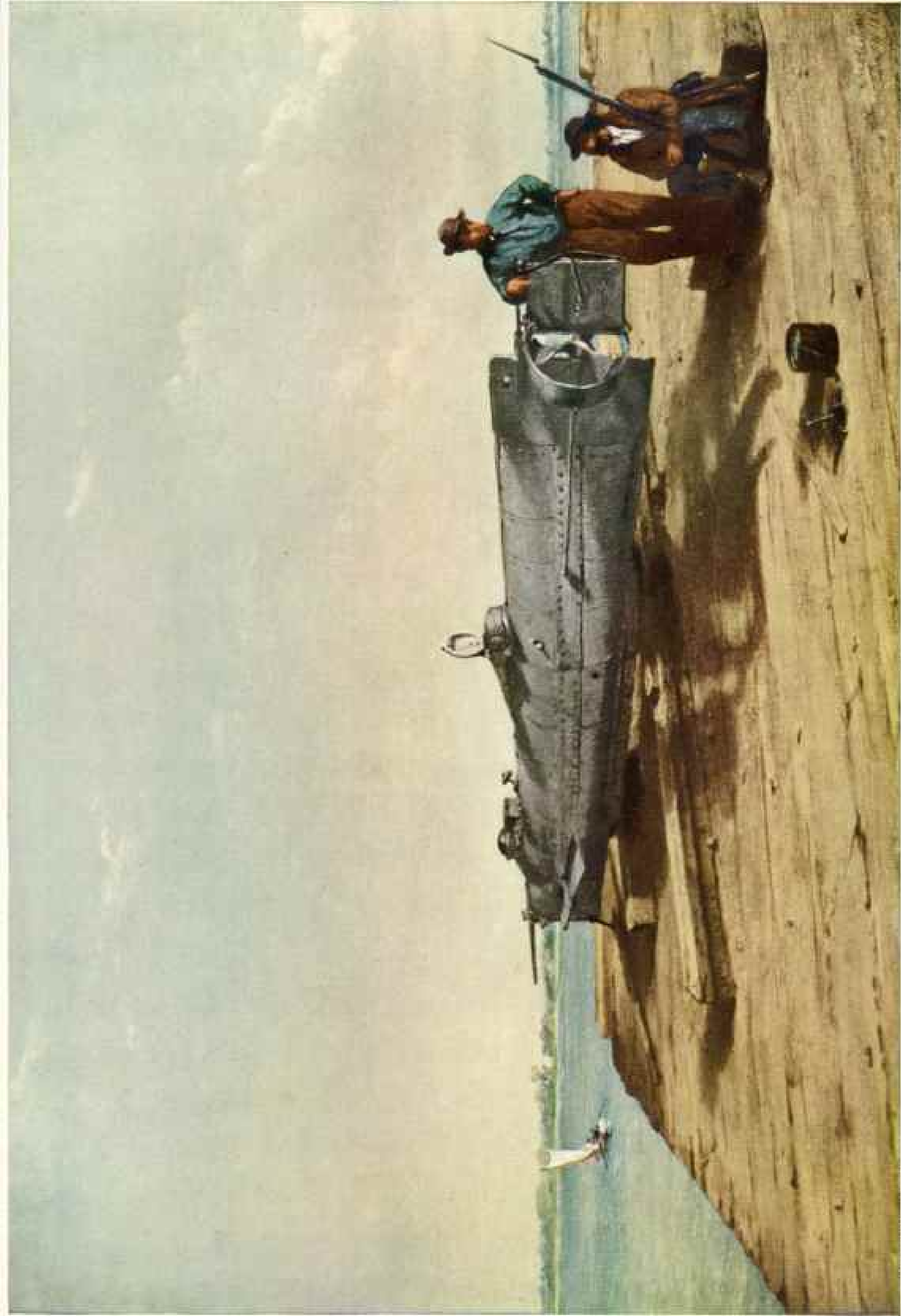
Loan by Metropolitan Museum of Art.

THOMAS HOWENDEN (1840-95) • *The Last Moments of John Brown*

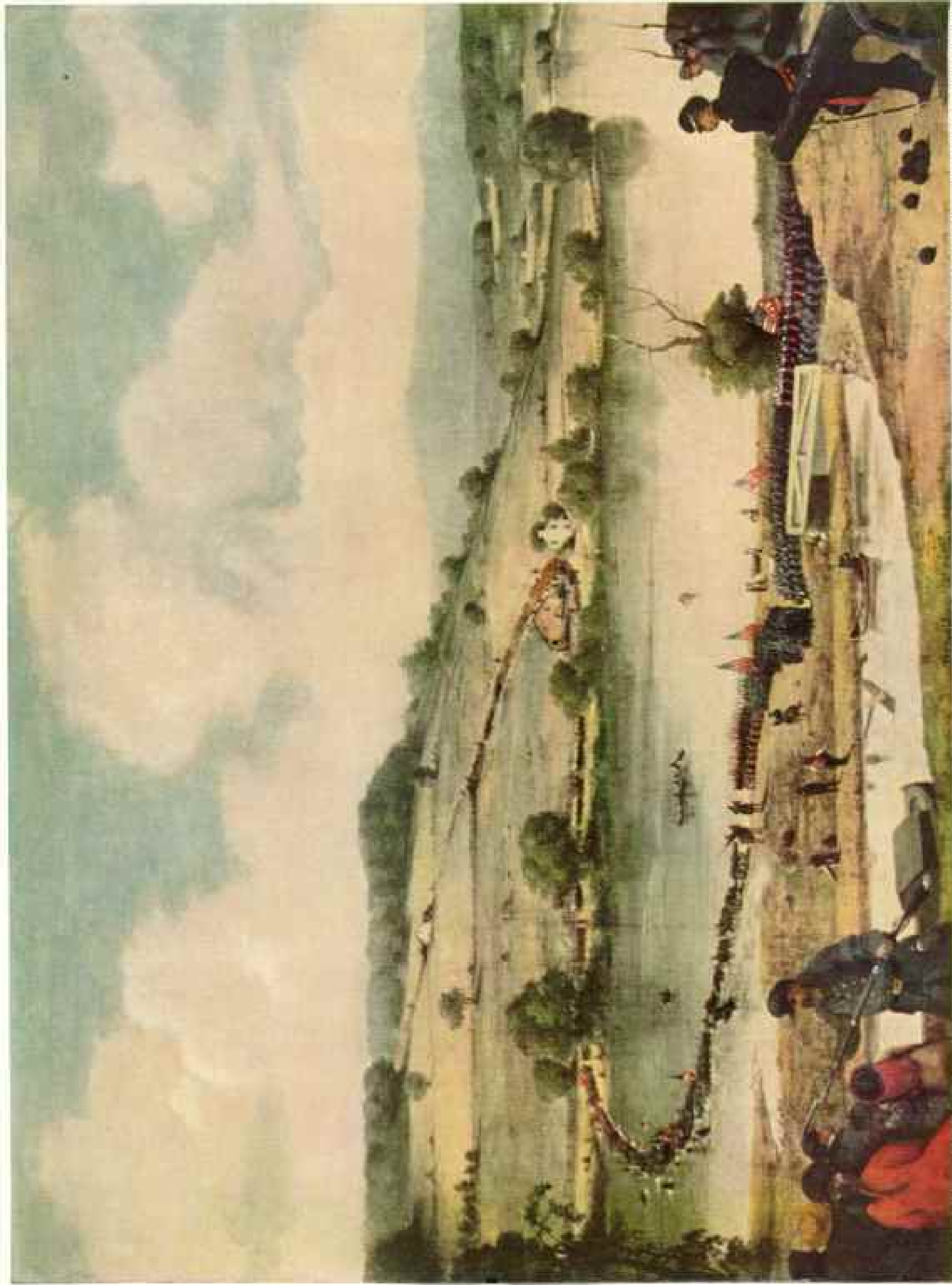
While others debated slavery, John Brown violently freed slaves and murdered slaveholders. In 1859 he rode into Harpers Ferry (then in Virginia), seized the armory, and called on Negroes to revolt. Besieged, he was captured by U. S. Marines led by Col. Robert E. Lee. Two of his sons died in the fight. Condemned, Brown welcomed propaganda's opportunity to turn defeat into victory by "hanging a few minutes by the neck." Soon indeed "John Brown's Body" became a Union marching song.

Reporters and magazine illustrators diligently covered Brown's last days. Artist Howenden, born in Ireland, portrayed a martyr, in gallow's rope, carpet slippers, and disguise-grown beard, kissing an infant slave. His painting commanded awed attention at the Corcoran exhibit.





CONRAD WISE CHAPMAN (1842-1910) • *The Confederate Submarine Torpedo Boat H. L. Hunley (1865)*



DAVID G. BLYTHE (1861-63) • General Doubleday Crossing the Potomac (June, 1863)

Lead by National Journal: Hall of Fame and Museum



© National Geographic Society

WINSLOW HOMER (1836-1910) • *Pitching Quoits*

"North Africa!" says the beholder at first glance. He is wrong by 4,000 miles. These old-time "Moors" were no less American than today's regular-becked lodge brothers. The hawthorn fessers were Civil War troops who, like certain Bocher tribesmen, were called Zouaves. Frenchmen, recruiting Algeria's true Zouaves, adopted their uniform. Their example was followed about a century ago by several American drill companies.

Swaggering in scarlet and blue, the militiamen cut a grandly figure at Fourth of July parades; but when they marched off to war, their colors made perfect targets and their baggy pants and braided caps drew gibes from platoon C's of the time.

In 1862 Winslow Homer, a little-known magazine illustrator only a few years removed from lithographer's apprenticeship, met these soldiers enjoying war beside the Potomac while they waited for McClellan to lead them into Virginia. The artist sketched the scene; painted it later in New York. The picture appeared in 1864.

Young Homer did some 20 war paintings, but only one dealt with battle. Not flag-carrying heroes or generals on horseback, but hungry, homesick, malnourished human beings were his art.

Europe and the Old Masters did not inspire the artist; his ideas were his own, and they were American. His countrymen, instinctively responding to his native flavor, lauded him with beauty. Today museums outbid one another for Homers.

"Pitching Quoits" does not rate with Homer's later and greater works. One biographer sees no evidence here of "future greatness." Another grants "photographic realism" but no artistic quality.



GEORGE PETER ALEXANDER HEALY (1813-94) • *The Peacemakers* (March, 1865)



© National Geographic Society

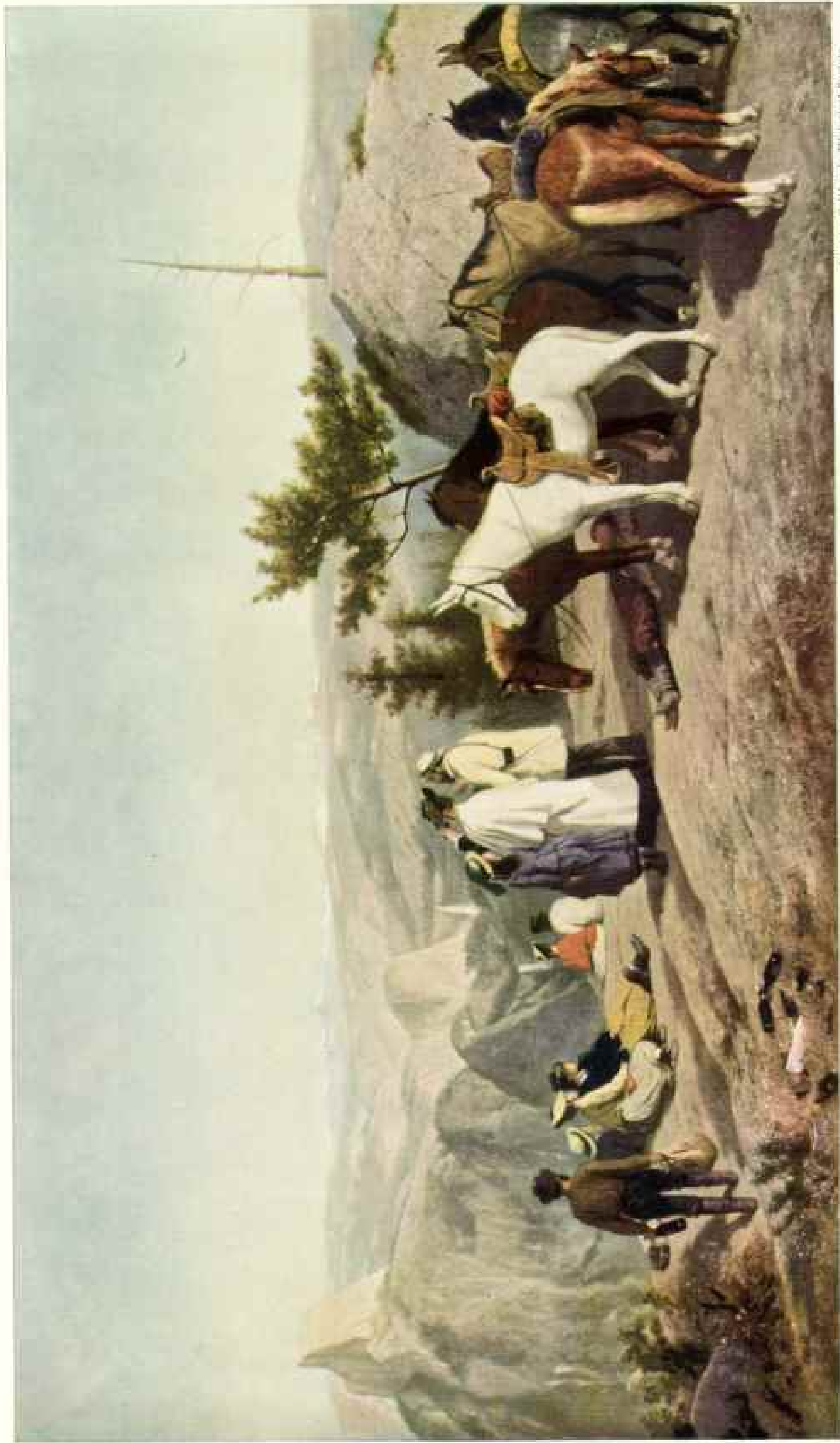
203

### C. BLESS • *The Merrimack and the Monitor in Hampton Roads*

The Confederate Merrimack (or Virginia) and the Union Monitor, fighting the first battle between ironclads, damaged wooden warships. On March 8, 1862, Merrimack, a frigate rebuilt with sloping iron sides (right), destroyed part of the Federal's wooden fleet. Coming out next day to finish the masted *Minnesota* (left), she met the "Yankee chessboard on a raft" (center). They fought for hours at point-blank range, neither seriously damaging the other. The drawy moved the Union fleet. Later Merrimack was burned; Monitor sunk by a gale.

Lent by Mr. and Mrs. W. E. Gibson





© National Geographic Society

WILLIAM HAIN • Yosemite Valley

Lent by California Historical Society

Henry Greely in 1870 admired Half Dome (left) and possibly Nevada Fall (upper) and Vernal Fall (lower); but on seeing Yosemite Falls (not shown) at low volume, he wrote, "Humbly!"

Thaine riders, standing near Glacier Point, were painted in 1874. To inspect the valley, they had to descend a hair-raising cliffside trail. "One false step and we are all gone bounding over rocks," one visitor wrote. "(Our horses), with trepidous ears, calculate each step's desperate chances."

Soon humpy stagecoaches were rattling forth. In 1900 the first automobile, a Stanley Steamer, jolled into the park. Nowadays smooth highways eliminate discomforts.



WINSLOW HOMER • *The Country School*

When other artists looked abroad for elegance and beauty, Homer sought themes at home. Using no condescendments, he painted what he saw. "He is wholly in sympathy with the rude and uncouth conditions of American life," said the *Art Journal* in 1877. Henry James, who preferred Europe to America, wrote: "We distrust . . . his freckled, straight-haired Yankee orphans, his flat-breasted residents . . . his calico umbrellas, his flannel shirts, his cowhide boots. He has chosen the least pictorial features (and) he has resolutely treated them as if they . . . were every inch as good as Copernic or Titian's; and, to reward his sincerity, he has uncontestedly succeeded."

Paris viewed "The Country School" but gave it no prize. The judges were said to feel that the artist looked "holish." Nowadays teacher may appear idealized, but in 1871 she represented true pioneering. Homer, in fact, was one of the first to paint the American Girl, who since has adorned countless magazine covers.



LOUIS COMFORT TIFFANY  
(1848-1933)

*Old New York*

New York's galleries and art schools have attracted many art-ists; but until the turn of the cen-tury few painters looked upon the city, with its old-time tenements, as a pictorial subject.

Yet all through the years, down to the present, New York has had quiet little neighborhoods, almost as isolated as villages, where stores and houses, and even lanes in the streets, never seem to change. Present-day artists appreciate their charm.

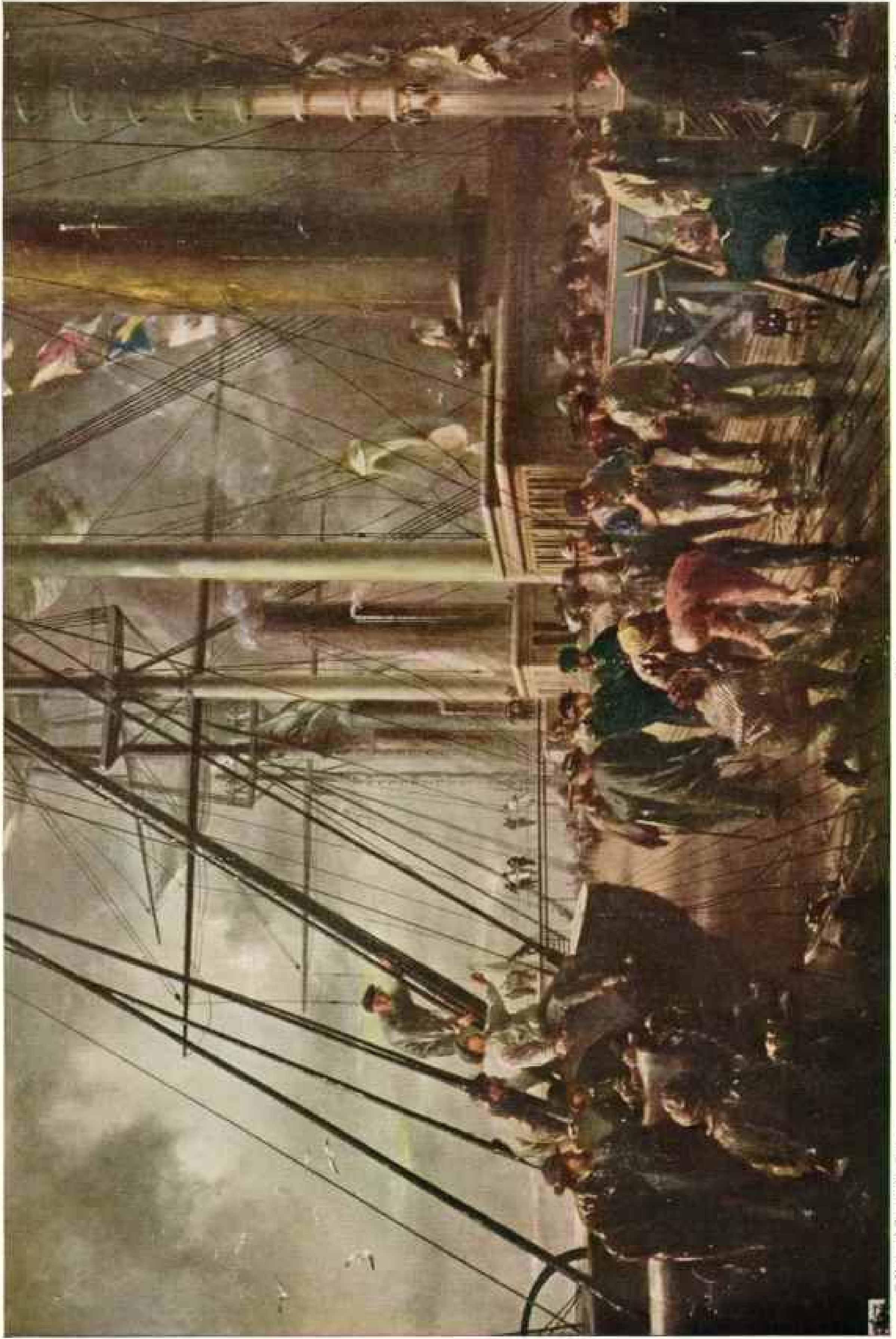
Young Tiffany, a native New Yorker, painted this spot, identi-fied as Duane Street, around 1875. Along with the patched boards, croaky windows, and dis-crypt chimneys, he painted out the salesman's potted plants.

Tiffany, versatile son of a fa-mous jeweler, might have taken the easy selling rings and neck-laces, but instead he chose to toil and experiment with art. No sooner did he establish a reputa-tion as a painter than he invented a process of working his pigments directly into stained glass. For Mexico City's National Theater he created a brilliant stained-glass curtain weighing twenty tons. Delicate blown-lead he fashioned from his own Favrile glass. He also designed cups, teapots, and jewelry.

In 1910 the artist established the Louis Comfort Tiffany Foun-dation for art students, endowing it with a million dollars.

© National Geographic Society

Look to the Right in America



CHARLES F. ULRICH  
(1855-1906) • *In the  
Land of Promise:  
Castle Garden*

Castle Garden, built around 1807 as a fort, was originally New York's West Battery. Retired to civilian life, it welcomed such notables as Lafayette, Kosciuszko, and the Prince of Wales. More here depicted started his telegraph, and Jenny Lind made her American debut. In 1853 Castle Garden became an immigration depot, and during the next 33 years it welcomed 7,690,000 aliens. Ellis Island took over immigration duties in 1890, and a few years later Castle Garden became New York City's Aquarium. The circular old structure is being restored as a national monument.

Artist Ulrich, a native New Yorker, won prizes at home and abroad with this painting, which he completed in 1884. Harper's Weekly reproduced it February 2, 1880, as "our dough-punch picture of this week," together with the comment:

"Castle Garden, though 'hallowed' by clustering memorials . . . is in reality a disgrace . . . A duncem door admits the foreigner . . . within he finds cheerless and uncomfortable wooden benches . . . If . . . he desires to cleanse himself . . . there is no bath . . . If hungry . . . he must confine himself to coarse bread, cheap soup, and mysterious coffee . . ."

© National Geographic Society  
Curtis Gallery of Art



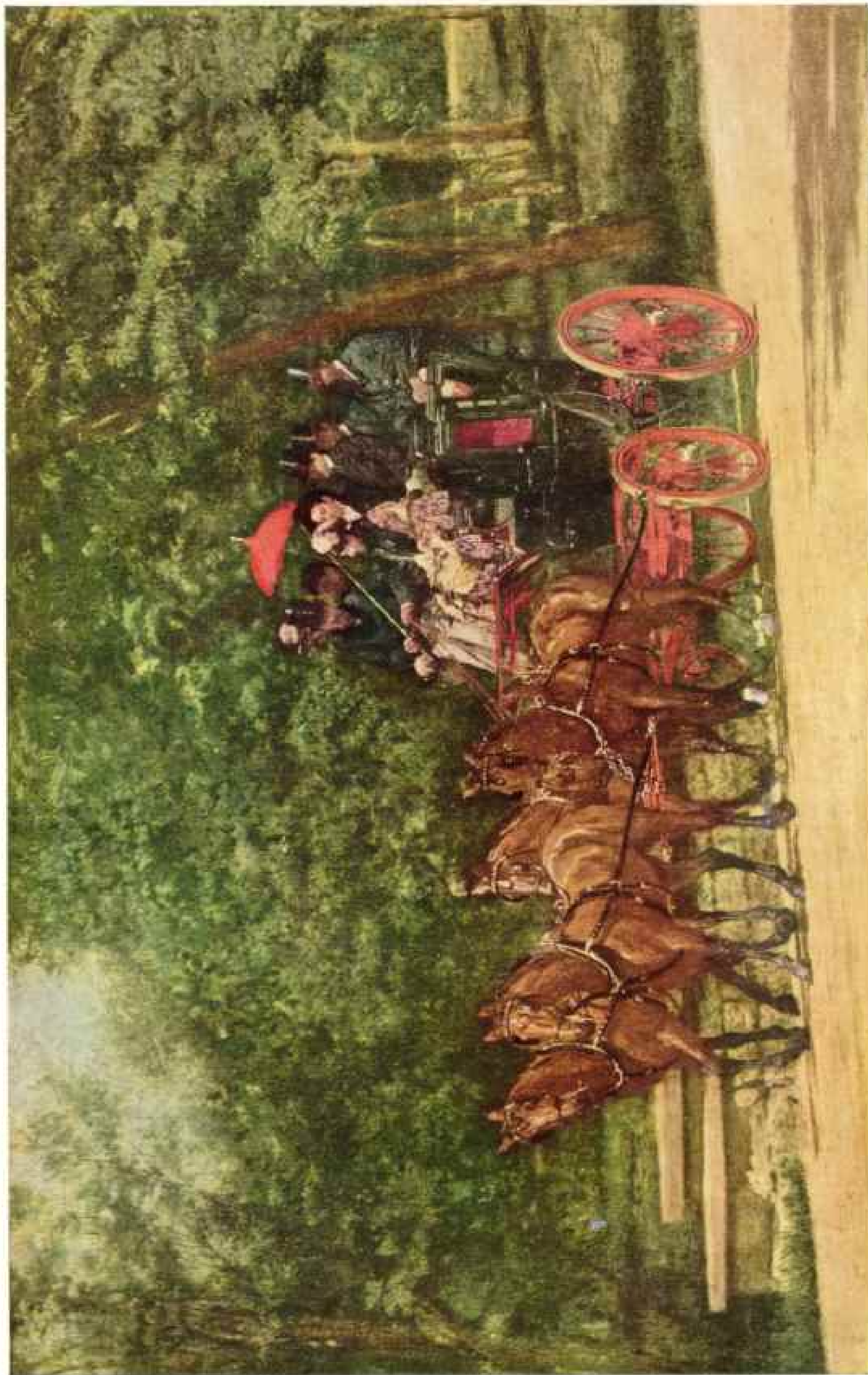


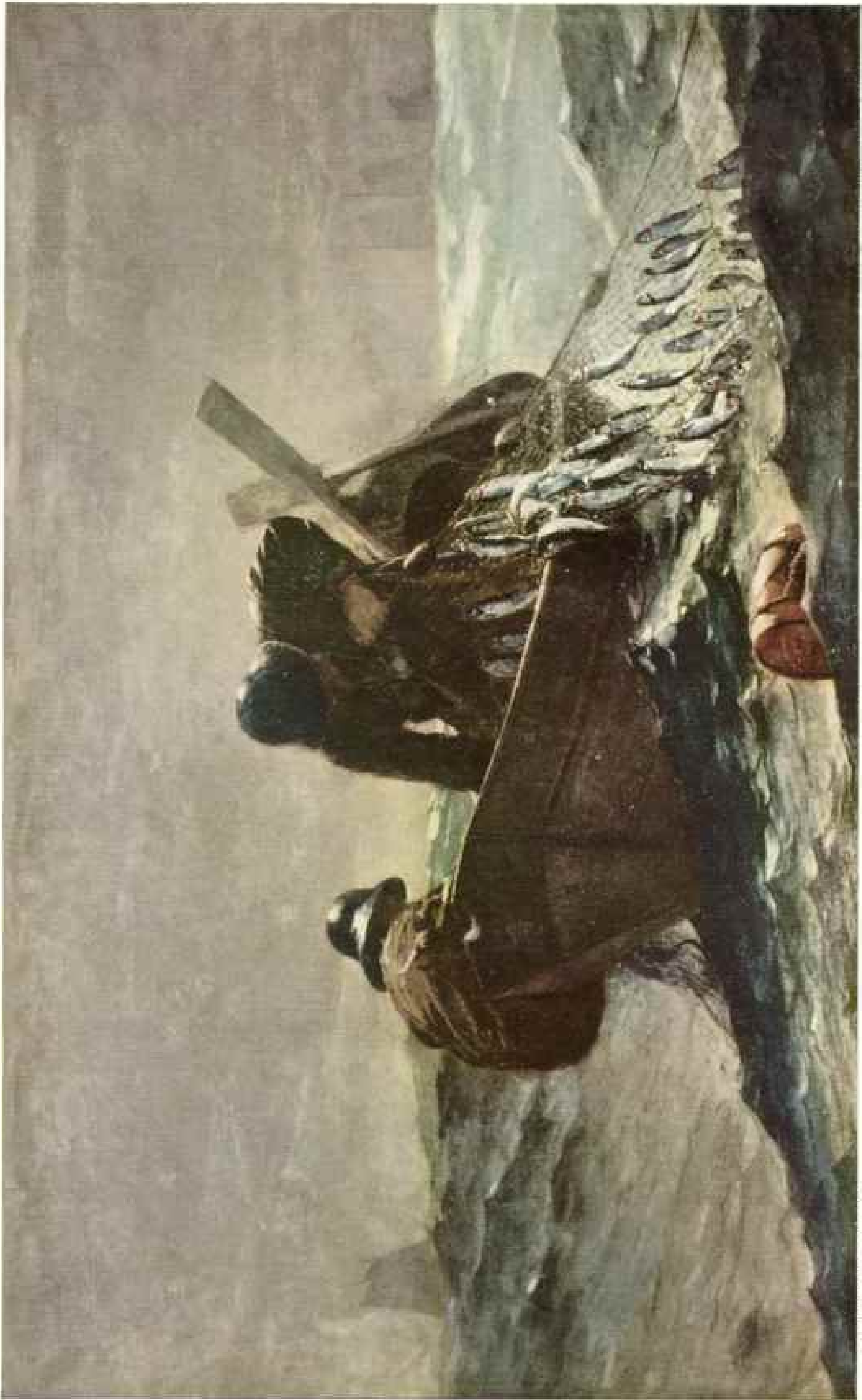
© National Geographic Society

110

FREDERIC REMINGTON (1861-1909) • *The Fight for the Water Hole*

Lent by Museum of Fine Arts of Boston





© National Geographic Society

211

WINSLOW HOMER • *The Herring Net*

Homer as a marine artist dramatized the struggle of man against the elements. His heroes accepted danger as part of the day's work. Giving up titles, Homer built a Maine cottage overlooking the Atlantic, and sketched the wild shores from the shelter of a small portable studio. A trip with the fishing fleet in 1884 resulted in a series of deep sea paintings. Among them, "The Herring Net" captured an eerie atmospheric effect.

lent by Art Institute of Chicago





© National Geographic Society

212

Lent by Mrs. Helen Henry

EDWARD MORAN (1829-1901) • *Unveiling the Statue of Liberty*

A raw, wet day greeted *Liberty Enlightening the World*, France's gift to America, on October 28, 1886. New York's dripping paraders marched past shivering French delegates. Out in the harbor, Miss Liberty stood shrouded in mist and the French flag. Every conceivable craft, flying every flag known to the sea, thronged Bedloe's Island, her pedestal. As her veil was dropped, Liberty's face shone through the haze.

Then, said the *New York Times*, "a hundred Fourth's of July broke loose." Tugs bellowed, whistles screamed, and naval guns roared.

English-born Edward Moran, the artist, worked as a weaver until an American employer recognized his true talent.

# Flags of the United Nations

BY ELIZABETH W. KING

*Paintings by Irvin E. Alleman, Betty Haynes Baker, and Carlotta Gonzales Lahey*

**A**RMED FORCES campaigning in Korea have fought for the first time in history under a common symbol, the Flag of the United Nations (page 221).

This blue flag, with a globe outlined in white in the center, was devised by Secretariat members for the special Balkan Commission investigating incidents on the Greek-Yugoslav border in 1947. On October 20 of that year it was adopted as the official UN emblem (page 215).

When the United Nations moved to end aggression in Korea by force, Trygve Lie, Secretary-General, sent the Commander in Chief an already historic UN flag (page 215). It was the emblem flown by the late Count Folke Bernadotte and Dr. Ralph J. Bunche, 1950 Nobel Peace Prize winner, during their negotiation of peace in Palestine for UN.

General of the Army Douglas MacArthur, first commander of UN forces, acknowledged receipt with these words:

"I accept this flag with deep emotion. It symbolizes one of the greatest efforts man has ever made to free himself. The Far East Command will do its best to uphold this noblest of ideals."

## UN Flag Flown "Concurrently"

President Truman requested General MacArthur to fly the UN flag "concurrently" with the flags of the nations whose forces had joined the international effort to restore peace. Over his Tokyo headquarters General MacArthur placed the UN flag at the right of the Flag of the United States, in the position of honor, to signify his position as commander of the combined UN forces.

In the United States the Stars and Stripes fly in the position of honor in conformity with the flag code adopted by Congress in 1942. This practice accords with regulations for flying the UN flag as outlined in the Secretary-General's Bulletin of July 28, 1950: "The manner and display (of the UN flag) shall conform in so far as possible to the laws and customs applicable to the display of the national flag of the country in which the display is made."

Fighting men of the United States, the United Kingdom, and other countries represented in Korea have flown the United Nations Flag as well as their own cherished symbols.

Headed by this international banner of

peace and co-operation, the principal flags of the 60 member countries of the United Nations are presented herewith in 180 paintings by National Geographic staff artists. They appear in alphabetical order, beginning on page 221. The presentation is the first complete collection of its kind to be published in the six years since UN was born.

## Flags of New Nations Shown

Some of the flags reproduced represent brand-new nations, notably Indonesia (page 227). Infant among new countries is that 3,000-island Republic, to which the Netherlands transferred sovereignty on December 28, 1949. Most recent member of the UN, Indonesia was admitted on September 29, 1950.\*

Other comparative newcomers are the Philippines (page 219) and Israel, formerly a mandate of Great Britain under the name of Palestine. Lebanon and Syria used to be a French mandate. Iceland was united with Denmark. India, Pakistan, and Burma all were embraced in the British Empire till after World War II. One of the newest flags is that of the President of India; it was first raised on January 26, 1950.

Until recent years, Saudi Arabia and Yemen were so little known to the Western World that accurate information on their flags was unobtainable when the NATIONAL GEOGRAPHIC published "Flags of the World," by Gilbert Grosvenor and William J. Showalter, with 808 paintings, in September, 1934. Now, of course, they are included.

In all, this series shows national emblems for 13 countries not represented as independent nations in the 1934 compilation.

Unfamiliar to most people are the flags of the Ukrainian and White Russian Soviet Socialist Republics. They are shown because these subdivisions of Russia have membership and votes in the UN.

Publication of flags of the United Nations marks a further step in The Society's authoritative presentation of national flags over a period of more than 30 years. First in the series was the widely acclaimed Flag issue of October, 1917, with more than 1,100 paintings illustrating 14 articles on flags of the world by Gilbert Grosvenor and Byron McCandless.

\* See "Republican Indonesia Tries Its Wings," by W. Robert Moore, NATIONAL GEOGRAPHIC MAGAZINE, January, 1951.

Contrary to general belief, flags do not continue unchanged through the years. Few governments charge any particular agency with responsibility for keeping records of the specifications and history of their country's flags, or rules for their display. Keeping abreast of flag evolution in 60 nations presented many problems.

Embassies and legations in Washington aided in the painstaking quest for accurate data. Often they got in touch with their home governments to help answer detailed lists of questions. Drawings were inspected for correctness of designs and labels. Thanks to this close co-operation, the paintings are correct in proportion and accurate in color and design. All color pages are copyright by the National Geographic Society.

One major difficulty in reproducing flags is determining their proper proportions. For example, in 1949 I found the National Flag of Haiti pictured in 13 different proportions. The arms used as a badge varied from a tiny design in the center of one flag to a design in another so large that it made the stripes resemble a narrow picture frame. But official specifications adopted by the Haitian legislature in September of that year confirmed a small badge as shown on page 226.

Some countries prescribe the National Flag in their constitutions, but the descriptions frequently are too general to give all the details necessary for a drawing. Exact size of the red trapezoid in the National Flag of Iraq, for instance, is specified, but no mention is made of the size of the seven-pointed stars (page 227).

#### What Is True Blue?

Determination of true colors is a problem, even though the use of odd hues is rapidly vanishing. The proper shade of blue can be a nightmare for artists and color engravers.

The bottom stripe of Bolivia's flag is a deep blue-green, almost impossible to achieve in anything but hand-dyed material or oil or water-color paints. So the emblem usually is shown with a "flag-green" stripe (page 222).

The exotic amaranth color in the Royal Standard of Belgium is represented all the way from a dingy brick red to a royal purple. The Society's artists matched the color to a sample supplied by the Belgian Government (page 221).

Even more difficult are the designs used as "badges." A badge, as the term is applied to flags, is any distinctive symbol, or *charge*, on a flag. For instance, it may be a coat of arms, as on the National Flag of Guatemala (page 226); a part of the arms, as on the

Canadian Red Ensign (page 223); a group of stars, as in the flags of Australia (page 221); or a device like the elephant on the Thai Ensign (page 231).

Badges, especially if they are derived from coats of arms, usually are described in the technical vocabulary of heraldry. Two artists may study an heraldic description, called a *blazon*, and each may make drawings that conform to the specifications; yet the results may have a very different appearance.

For example, the *blazon* may call for the figure of a woman, draped in flowing robes. One artist pictures her as a ravishing beauty with diaphanous draperies; another envisions her as a statuesque creature with voluminous folds in her robe. Both are "right" from the standpoint of heraldry, but one conception becomes the accepted design and the other is discarded. The arms of both Peru and Colombia were redrawn last year.

#### Some Countries Have Several Flags

Unlike the United States, where Old Glory serves all "national" purposes, many countries use a variety of flags. In some the National Flag represents the government, the Ensign is a special national flag used by the navy, and the Merchant Flag is the emblem of nationality for merchant ships. Armies usually use the National Flag, or occasionally the Ensign. A few countries, such as Luxembourg (page 228), have special Military flags.

In some countries private persons are not permitted to use the National Flag. Their citizens may fly only the Merchant Flag, or, in some cases, streamers and pennants in the national colors.

A new designation appears in this series—Government Flag. Denmark, Iceland, and Norway use the designs ordinarily specified as their Ensigns to be flown on government buildings both at home and abroad. Costa Rica also follows this custom.

Iran has a special flag for government buildings and an Ensign besides (page 227).

Many flags have a design in the "canton," or corner, at the top of the staff side. Thus the Flag of the United States has the blue union with its stars in the canton; Uruguay shows a sun in the canton.

Flags flown for official purposes are usually large—seldom less than 3 by 5 or 4 by 6 feet. Flag designers can, therefore, use elaborate badges with the knowledge that they will be visible. In representing such flags in the small scale necessary for the printed page, some of the badges do not show all the details. Thus this series includes separate representations of the smaller badges.

One growing group of flags is not represented: special Air Force Ensigns. Many countries now use the same flag for army and air force, but with the growing importance of air power, the number of special Air Force flags is rapidly increasing.

Detailed history and interpretation of the Flag of the United States and of the flags of the 20 Latin American Republics are omitted in the following descriptions of United Nations flags. Society members are referred to "Flags of the Americas," in the May, 1949, NATIONAL GEOGRAPHIC MAGAZINE, for additional information about them.\*

Paintings of the flags of the 21 American Republics are included, however, so that this series of Flags of the United Nations may be complete.

**United Nations, page 221.** On October 20, 1947, the General Assembly of the United Nations adopted its official flag (page 213).

The field is United Nations blue. The symbol in the center was prepared by the U. S. Office of Strategic Services for use at the 1945 San Francisco Conference.

The emblem, slightly revised from the original, shows a map of the world, omitting Antarctica. The vertical line in the center represents the Greenwich Meridian and the International Date Line. The map is surrounded by an olive wreath.

The flag may be used by "Governments, organizations, and individuals to demonstrate support of the United Nations and to further its principles and purposes," but for military operations it may be flown only "upon express authorization by a competent organ of the United Nations."

The Flag of the United Nations may be made in a number of standard sizes, the proportion of 2 to 3 generally being maintained. Late in 1950 UN regulations au-

\* This issue is still in print. Copies may be obtained from the Secretary, National Geographic Society, Washington 6, D. C., for 50 cents each in the United States, U. S. Possessions, and countries in the Postal Union of the Americas and Spain; elsewhere, 60 cents.



### General of the Army MacArthur Accepts a Young but Historic UN Flag

Gen. J. Lawton Collins, Chief of Staff, United States Army, presents the emblem to the Commander in Chief, United Nations Forces in Korea, atop the Dai Ichi Building in Tokyo, July 14, 1950. Trygve Lie, Secretary-General of the United Nations, sent the flag. It was flown first over Palestine during UN peace negotiations there (page 213). The original design was made for a Balkan Commission sent by UN to the Greek frontier in 1947. A few months later the General Assembly adopted the banner as the official UN flag. The flag at right is that of a five-star general. Three stars are obscured by the fold.

thorized the manufacture of flags in the same proportions as any National Flag of the country in which they are flown. This is in line with the generally accepted rule that when two flags are displayed at the same time, they should be as nearly equal in size as possible.

**Afghanistan, page 221.** The arms on the obverse of the Royal Standard show an oriental mosque. Below the steps are the numerals for 1308 after the Hegira, or A. D. 1929, when King Nadir Shah ascended the throne. "Afghanistan" is on the bottom ribbon. The crescent represents the wreath of wheat which legend states was placed on the head of the Afghan Emperor in 1747 with the prayer that the King would be a servant of the Islam religion and with the prophecy that he would never be defeated.

The reverse of the standard is translated, "In the Name of God the Gracious and Merciful; Mohammad Zahir (the name of the King), one who depends upon God only (the title of the King), King of Afghanistan."

Used in its present form since the reign of King Nadir Shah (1929-33), the National Flag has a black stripe for the period before independence; red, the War of Independence; green, independence and prosperity.

**Argentina, page 221.** The flag of the President carries the coat of arms of the country. Clasped hands signify fraternity and union. The sun is the "Sun of May," symbol of the bright rays which broke over the people when they declared their freedom on May 25, 1810.

Since 1944 the National Flag has been identical with the design approved in 1816 and confirmed in 1818. Ship's names in gold letters are added to the Ensign.

**Australia, page 221.** The flag of His Majesty's Governor General carries the Royal Crest (page 231).

The Englishmen who settled in Australia used the Union Flag (page 236) as their National Flag on land. Before the inauguration of the Commonwealth, the adoption of a distinctive flag was suggested, and the government organized a competition in which more than 30,000 designs were submitted. Four Australians and one New Zealander were the winners.

The design selected was the British Blue Ensign (page 236) with a large white star under the canton to represent the Commonwealth and five stars for the Southern Cross. This is frequently called "The Commonwealth Flag."

The large star originally had six points, one for each State; in 1908 a seventh point was added to symbolize the Territories of the Commonwealth.

The blue flag is limited to the Government and its Services; the red is for general use.

**Belgium, page 221.** The Belgian Constitution of 1831 provided for a black-yellow-red flag. Originally the colors of Brabant, the combina-

tion serves as a symbol of unity, for it incorporates the colors of the arms of the Provinces.

The National Flag is in the proportions of 2.6 to 3. Flown from the palace, it indicates the King's presence. The Royal Standard, flown when Royalty is at sea, shows the shield from the Royal Arms; since 1921 the King and members of the Royal Family have used a cipher on the Standard. The example shown is for Prince Baudouin, who will become King in September, 1951, on his 21st birthday.

Recent information indicates that in the future the Standard will omit ciphers; the corner crowns, somewhat larger, will be retained.

The Naval Force uses the Ensign adopted in 1950. The Marine of the State uses the former Ensign, now designated for "Government Vessels." This service runs the Ostend-Dover mail steamers, does hydrographic work, maintains buoys, etc. Merchant ships use the tricolor in 2 to 3 proportion. Ships commanded by Naval Reserve officers use a flag similar to the one for "Government Vessels," but without the crown.

**Bolivia, page 222.** The shield on the coat of arms shows Mount Potosí, emblem of mineral wealth. Nine gold stars represent the Departments of the Republic. National colors of red, gold, and green represent animal, mineral, and vegetable kingdoms.

**Brazil, page 222.** The President's Flag now has the coat of arms in the center. The 20 stars represent the political divisions of the country when the arms were adopted. The motto is *Ordem e Progresso*, "Order and Progress."

**Burma, page 222.** The President's Flag carries a peacock, long considered the national emblem. After separation from India in 1937, Burma used the British Blue Ensign (page 232) with a peacock badge. During World War II, the Burmese resisting the Japanese used a red flag with a white star.

In 1948 Burma, which had been under Britain since 1826, gained its independence. The National Flag perpetuates the memory of the Resistance Flag with the large star; the smaller stars symbolize the union of Burmans, Karens, Shans, Kachins, and Chins.

The significance of the large star is explained by Shakespeare's 116th Sonnet ("It is the star to every wand'ring bark"). The white stands for purity, truth, steadfastness; dark blue, the depths of the night sky out of which the stars shine forth; the red, courage, determination, unity.

**Canada, page 222.** The flag of His Majesty's Governor General carries the Royal Crest (p. 231).

By Admiralty Warrant in 1892, Canada was authorized to use the Canadian Red Ensign as a Merchant Flag. In 1945 this flag, which is the British Red Ensign with the shield from the Canadian arms as a badge, was approved for use whenever a distinctive Canadian flag is required. Thus this flag serves as a National Flag, al-



217

© Frederick Hill, New York Times

### U. S. S. *Columbus* in Full Dress Receives a Call from King George VI

A 21-gun salute greeted the British monarch November 8, 1949, as he boarded the cruiser at Portsmouth, England, to greet Admiral Richard L. Conolly, Chief of the United States Naval Forces in the Eastern Atlantic and the Mediterranean.

though the country does not have a flag specifically designated as such.

The badge illustrates the English, Scotch, Irish, and French origins of the people in the three lions, single lion, and harp (all taken from the arms of the King, page 236) and the fleur-de-lis, traditional emblem of France. The maple leaf represents all Canadians. Canada uses the Blue Ensign with the badge for vessels in government service.

**Chile, page 222.** The Chilean national arms carry the motto, *Por la Razón o la Fuerza*, "By Right or Might," which was the slogan used during Chile's war for independence. The star both on the arms and the flag may represent the Chilean Indians who used a star on their early pennants. Chile's colors may have been inspired by the Flag of the United States.

**China, page 223.** When the Manchu dynasty was overthrown and the Republic founded in 1912, a National Flag of five horizontal stripes was adopted. In 1928 the National Flag was changed to the one shown. It was designed by Dr. Sun Yat-sen, founder of the Chinese Republic. The sun, the party emblem in the National Flag, indicates rule of the Government by the Kuomintang. The sun's 12 rays signify the 12 two-hour periods of the day, symbolizing a progressive and enterprising spirit.

Colors symbolize "The Three People's Principles": blue for equality, justice, and democracy "by the people"; white for fraternity, frankness, and livelihood "for the people"; red for liberty, sacrifice, and nationalism "of the people."

The Communist regime in China adopted in October, 1949, a red flag with one large and four small gold stars in the canton.

**Colombia, page 223.** The colors of Colombia's flags are derived from the flag of Francisco Miranda. (See Venezuela, page 238.) The arms used on the Ensign have recently been changed; the condor now faces *dexter*, or to the side of honor. The shield shows a pomegranate, cornucopias, a liberty cap, and the Isthmus of Panama.

**Costa Rica, page 223.** All the countries of Central America except Panama have flags derived from the blue-white-blue horizontal striped flag adopted by the United Provinces of Central America in 1823. Costa Rica made its flag distinctive by adding a red stripe in the center.

The stars on the arms honor the Republic's original five provinces.

**Cuba, page 223.** A golden key on the arms symbolizes Cuba as the key to the Gulf of Mexico. *La Estrella Solitaria*, the "Lone Star Flag," was designed by an exiled Cuban patriot in New York City. First conceived as a light on the way to freedom, the star now signifies Cuba's glory and independence.

**Czechoslovakia, page 223.** The President's Flag carries the national arms. The motto is translated, "Truth Prevails."

Bohemia (Czechs) probably used the white-over-red striped flag as early as the 12th century. Conquered by Austria in 1620, the country retained the privilege of flying its flag.

Both Czechs and Slovaks used this white-over-red flag in their attempts to gain independence, although the Slovaks had their own provincial flag.

The provisional government of Czechoslovakia in 1918 placed the white-red stripes on a blue field, the blue from the arms of Slovakia. The present flag, adopted in 1920, arranged the blue in a triangle at the staff to represent the hills in the old Slovak arms.

**Denmark, pages 223-224.** The Royal Standard is the Dannebrog with the Royal Arms. The supporters are giants, or possibly Cimbrians, the savage tribe which was driven out of north Jutland by the floods some 2,000 years ago. There are three superimposed shields. The largest shield, divided by the Dannebrog Cross, carries three blue lions to represent Denmark proper; two lions, the Duchy of Slesvig; three crowns, the former union with Sweden; a ram, the Faeroes; a polar bear, Greenland; a lion with nine red hearts, Jutland; a golden dragon, Vandalia. Formerly the arms carried a falcon for Iceland (page 220).

Below the shield are chains for the Order of the Elephant and the Order of Dannebrog.

Legend tells that the Danish Flag dropped from heaven on June 15, 1219, when King Waldemar II defeated the Estonians in the battle of Lyndanise (modern Tallin); some versions say the King merely saw the cross in a vision. The date is a paradox, for the flag with the cross is carried on coins of Waldemar I (1157-82). Dan-

nebrog literally means "Dane's cloth," but it is usually explained as "Denmark's strength."

**Dominican Republic, page 224.** The arms show a book of the Gospels. The motto, which means "God, Country, and Liberty," was the password of the secret society which achieved the country's independence. The colors are red, for the blood of heroes; white, ideals of redemption; blue, liberty.

**Ecuador, page 224.** Like Colombia and Venezuela (page 238) Ecuador's colors are derived from the flag of Francisco Miranda. The arms show the signs of the Zodiac for March, April, May, and June, 1845, when the country was fighting against foreign domination.

**Egypt, page 224.** Credited by historians with being the first country to use flags, Egypt employed celestial symbols at the dawn of history, indicative of the country's early interest and achievements in astronomy.

From 1517 until 1914, Egypt's flags were identical with those of Turkey (page 236) except for a five-pointed instead of a six-pointed star introduced by Mohammed Ali in 1826, and special distinguishing flags for the Khedives of Egypt.

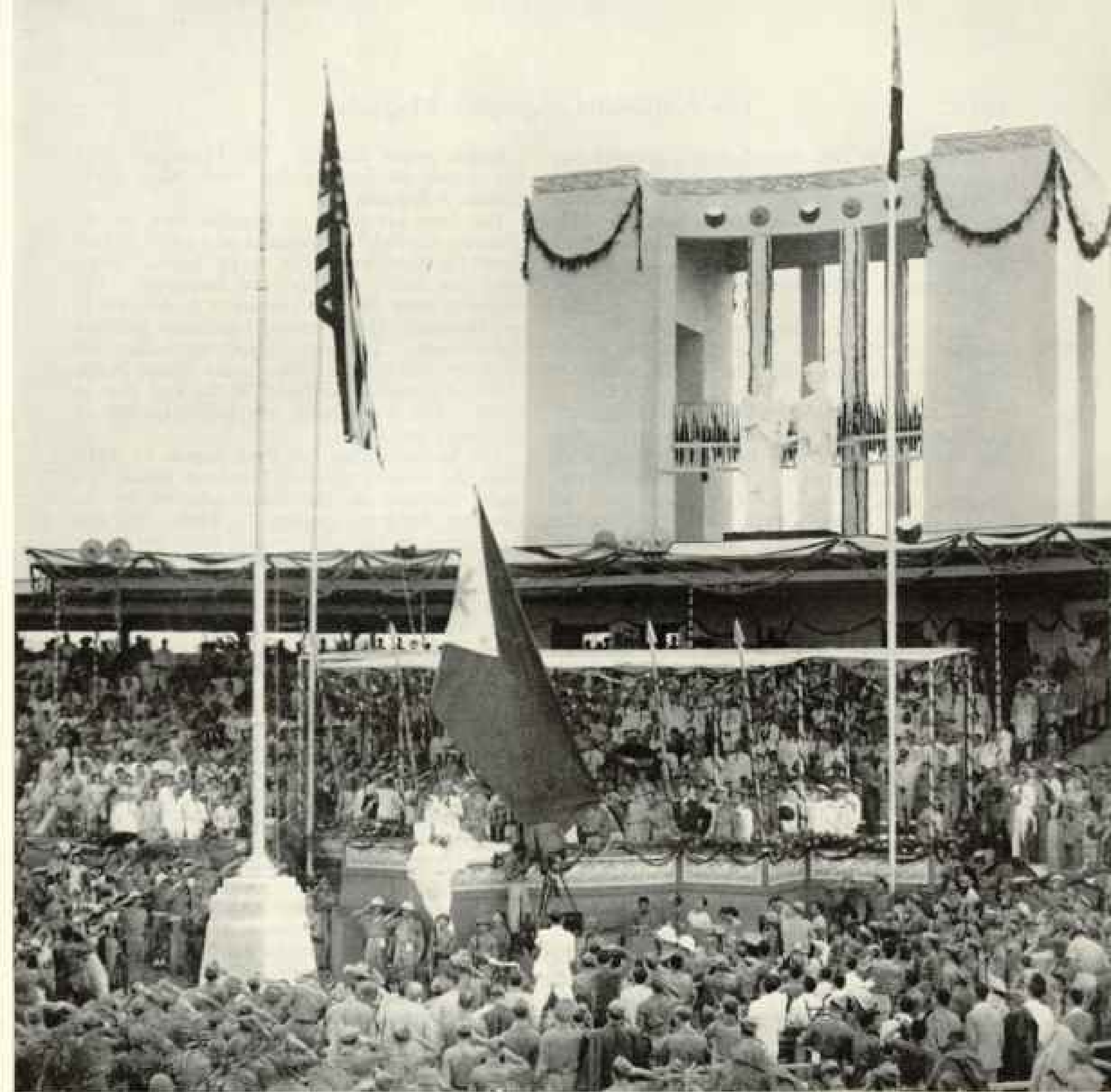
From 1914, when Great Britain declared her protection over Egypt, until 1922, Egypt used a red flag with three white crescents and three stars.

After achieving independence, Egypt adopted her present green National Flag to signify the agricultural nature of the country. The Army Flag (not shown) has crossed swords instead of anchors as used on the Ensign. The Royal Standard (Afloat) bears the Royal Arms, which are surrounded by the chain of the Order of Mohammed Ali, highest Egyptian decoration.

**El Salvador, page 225.** This country's flags stem from that of the United Provinces. (See Costa Rica, above.) The date on the arms commemorates independence. The motto, "God, Union and Liberty" on the Merchant Flag is officially silver, but frequently shown in blue for visibility. Citizens may use either the National or Merchant design.

**Ethiopia, page 225.** The national tricolor is derived from three pennants used on a single staff in 1894. The colors have several interpretations. They may represent the rainbow, or they may stand for the Christian virtues of faith, red; hope, green; charity, yellow. Another version is that they signify the Holy Trinity.

The obverse of the Royal Standard shows the Lion of Judah with the motto "Conquering Lion of the Tribe of Judah," part of the Emperor's title. The Grand Cordon of the Seal of Solomon and the other Seals (interlaced triangles) signify that the Emperor is a descendant of King Solomon. The reverse carries the Royal Arms. The crown at the top shows St. George slaying the



### In Solemn Silence Stars and Stripes Yield Place to the Flag of the Filipino Republic

Manila's historic ceremony of July 4, 1946, marked the birth of Philippine independence. U. S. Ambassador Paul McNutt lowered his country's flag from a silver pole as the late President Manuel Roxas hoisted the new republic's emblem (pages 230 and 235). The Flag of the United States had waved over the islands for 47 years.

dragon; the crown appears again on the seat of the throne. The seal, the lion, and the motto are also incorporated in the design. The flag carries a gold fringe.

**France, page 225.** The President uses the National Flag with his initials, "VA," for Vincent Auriol, in the center.

The *Assemblée Nationale* adopted the Tricolor in 1789 as the national emblem; in 1794 it was decreed for the Navy, and in 1812 for the Army. Dropped in 1815, the Tricolor was restored fifteen years later.

Many flag students credit Louis XVI with the origin of the combination which forms the Tricolor; others say that these colors belonged to

the House of Orléans. Commandant Henry Lachouque, in a recent study of the flags of the National Guard of Paris, claims that though the combination had been used as early as the 16th century, the Marquis de Lafayette was responsible for its adoption in 1789. Lafayette used the colors as a cockade for the Paris Guard, from which they evolved into the national symbol.

The stripes on the Tricolor, originally equal, were later made 30, 33, and 37 per cent of the width of the flag, a proportion which made them appear equal at a distance.

The 1946 Constitution specified that bands on the National Flag should be equal, but in practice the Ensign and Merchant Flag retain the old proportions.



**Greece, page 225.** His Majesty's personal flag recalls that King Paul is a descendant of the royal family of Denmark (page 218). The Royal Standard carries the Royal Arms adopted in 1863. The shield bears the Greek cross. The figures of Hercules signify strength in carrying out justice. The motto is, "My strength is the love of the people."

Greek flags have remained substantially unchanged for 125 years. The nine stripes represent the nine years of the War of Independence, 1821-30.

The National Flag is flown at Greek seaports and outside Greece; the same design serves for the Merchant Flag. The Fort, or Service, Flag is used by military establishments inside Greece. Fighting units fly the Fort Flag, but replace the crown with a picture of St. George slaying the dragon. The simple white cross design without any other device serves as the National Flag inside Greece.

**Guatemala, page 226.** Like Costa Rica (page 218), Guatemala takes the color of its flag from that of the United Provinces. The scroll carries the date of independence, September 15, 1821. The quetzal is symbolic of freedom.

**Haiti, page 226.** Red in the Haitian flag stands for Mulattoes and blue for Negroes. The arms carry a palm tree for pride surmounted by a liberty cap (page 214). The motto is "Union Makes Strength."

**Honduras, page 226.** Like Guatemala and Costa Rica, Honduras takes its flag colors from the United Provinces. The flag with arms and stars is now the "War Flag," or the Ensign (page 214). The stars represent the ideal of a United Central America. The legend is Spanish for "Republic of Honduras—Free, Sovereign, Independent."

**Iceland, page 226.** The separation of Iceland from Denmark was marked by the omission of the silver falcon from the Danish arms (page 218). The new nation kept the flags which it had used under the Danish crown.

The "Split Flag" used on government buildings is ordinarily designated as Iceland's Ensign, but since the country does not maintain armed forces, it is in effect a "Government Flag" (page 214).

Following complete independence in 1944, a flag was adopted for the President. The arms on this flag have a dragon, vulture, bull, and giant for supporters; these are the guardian spirits mentioned in the *Heimskringla* ("Lives of the Kings"), the *Edda* of Snorri Sturluson. The white cross used on the flag is changed to silver on the shield. The shield rests on a slab of basalt, reminder of the island's volcanoes.

The cross signifies that Iceland is a Christian country; since ancient times, blue has been considered the national color. The red stripe was added to the cross to differentiate it from the cross used in Greece.

**India, pages 226-227.** The President's Flag was raised on January 26, 1950, when India became a Republic.

The lions are based on a motif used on the "Sarnath Capital," the remains of a pillar erected about the third century B. C. by Asoka. Lions symbolize unity, equality, and fraternity. The elephant, from the fifth century A. D. frescoes in the Buddhist Ajanta caves, represents patience and strength. The scales, signifying justice and economy, are from a 17th-century design in the "Hall of Common Audience" in the Red Fort at Delhi. The bowl holds the lotus, symbol of prosperity and plenty.

The National Flag, raised on August 15, 1947, when the country attained Dominion status, is a slight variation on the design adopted by the Congress Party on January 26, 1930. The saffron stripe is for courage and sacrifice; white, peace and truth; green, faith and chivalry.

The wheel, also from the Sarnath Capital, is called the Dharma-Chakra or Wheel of the Law. In so far as it represents the spinning wheel, it stands for the welfare of the masses. As the Dharma-Chakra, it is the symbol of Universal Law, of the unending process of change and progress.

**Indonesia, page 227.** The President's Flag carries a star which might be interpreted, like the star on the shield of the country's arms, as representing divine omnipotence. The flag shown is for use on automobiles; it is square for other purposes; it carries a golden-yellow fringe to match the star.

While the red-over-white National Flag bears a marked similarity to the flag of Monaco, by tradition the Indonesian claim to the design goes back to the Matjopahit Empire (1200-1475). Disappearing with the destruction of that empire, the flag reappeared in 1629 when Java was reunited. With the establishment of Dutch supremacy, the flag was used in periods of revolt.

In modern times the flag dates from 1929 when the Indonesian National Movement sponsored it; with the recognition of the country's independence by the Netherlands in December, 1949, the flag was raised as the national emblem.

The flag symbolizes freedom and democracy.

**Iran, page 227.** The crown in the center of the Royal Standard is the symbol of the King's sovereignty.

In 1907 the Constitution of Iran adopted a tricolor; this now serves as the National Flag and Merchant Flag. Green stands for Mohammedans; white for peace; red for valor.

The Government Flag carries the rising sun with a lion, the ancient Persian badge. The Ensign used by the Army and Navy reveals the complete arms.

**Iraq, page 227.** Red, green, white, and black were used in pre-Islamic days for Arab standards. In time each color came to represent a period of Arab history: red for the Prophet Mohammed;



United Nations Flag



Afghanistan  
*Royal Standard, 1973*



Afghanistan  
*Royal Standard, 1993*



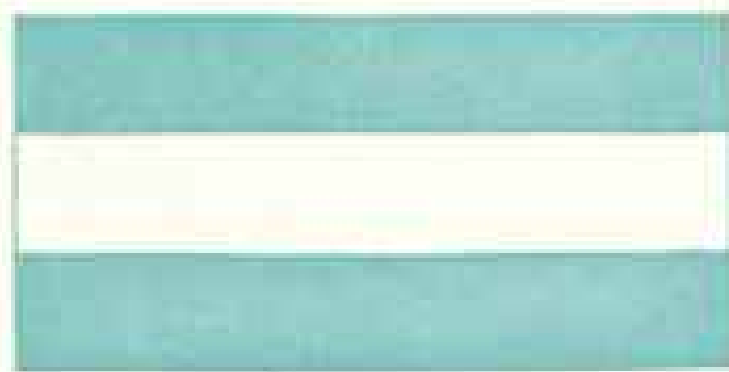
Afghanistan  
*National Flag*



Argentina  
*President's Flag*



Argentina  
*National Flag, Ensign*



Argentina  
*Merchant Flag*



Australia  
*Governor General's Flag*



Australia  
*National Flag, Ensign*



Australia  
*Merchant Flag*



Belgium  
*Royal Standard*



Belgium  
*National Flag*



Belgium  
*Ensign*



Belgium  
*Government Vessels Flag*



Belgium  
*Merchant Flag*



**Bolivia**  
*President's Flag, National Flag*



**Bolivia**  
*Coat of Arms*



**Bolivia**  
*Merchant Flag*



**Brazil**  
*President's Flag*



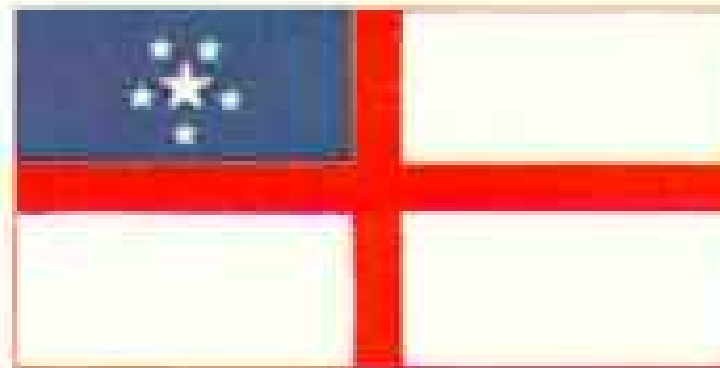
**Brazil**  
*National Flag, Ensign, Merchant Flag*



**Burma**  
*President's Flag*



**Burma**  
*National Flag*



**Burma**  
*Ensign*



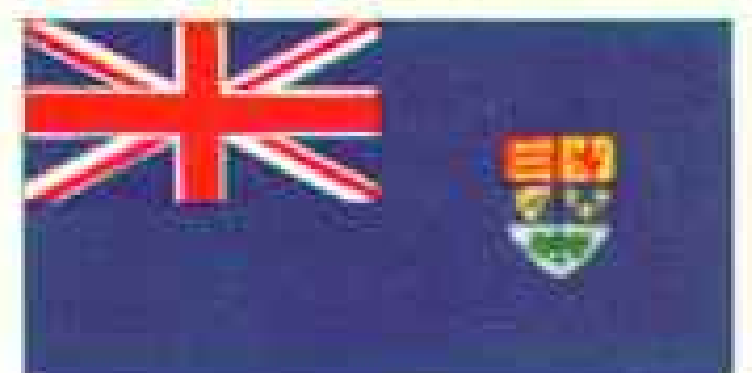
**Canada**  
*Governor General's Flag*



**Canada**  
*Canadian Red Ensign*



**Canada**  
*Badge*



**Canada**  
*Canadian Blue Ensign*



**Chile**  
*President's Flag*



**Chile**  
*Coat of Arms*



**Chile**  
*National Flag, Ensign, Merchant Flag*



China  
*President's Flag*



China  
*National Flag, Ensign*



China  
*Merchant Flag*



Colombia  
*National Flag*



Colombia  
*Coat of Arms*



Colombia  
*Ensign*



Colombia  
*Merchant Flag*



Costa Rica  
*Coat of Arms*



Costa Rica  
*Government Flag, Ensign*



Costa Rica  
*National Flag, Merchant Flag*



Cuba  
*President's Flag*



Cuba  
*National Flag, Ensign, Merchant Flag*



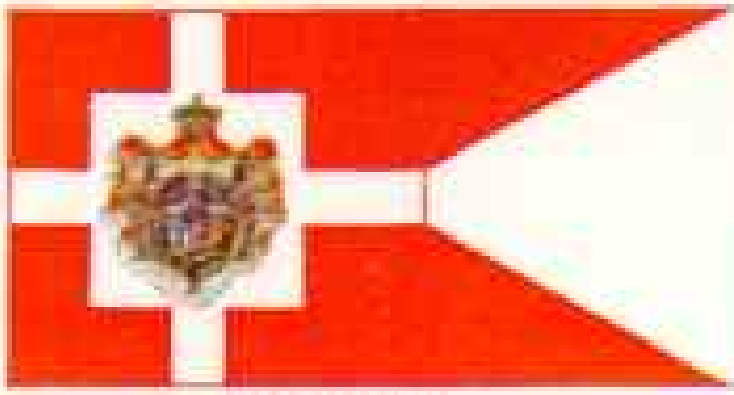
Czechoslovakia  
*President's Flag*



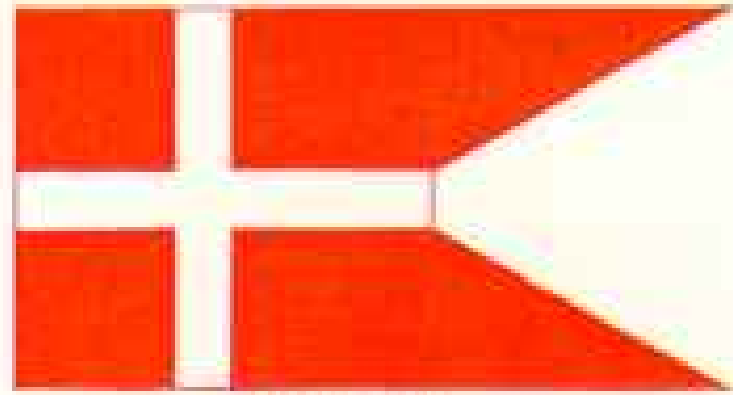
Czechoslovakia  
*National Flag*



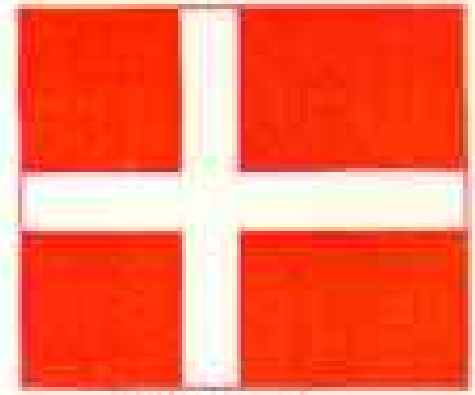
Denmark  
*Royal Arms*



Denmark  
*Royal Standard*



Denmark  
*Government Flag, Ensign*



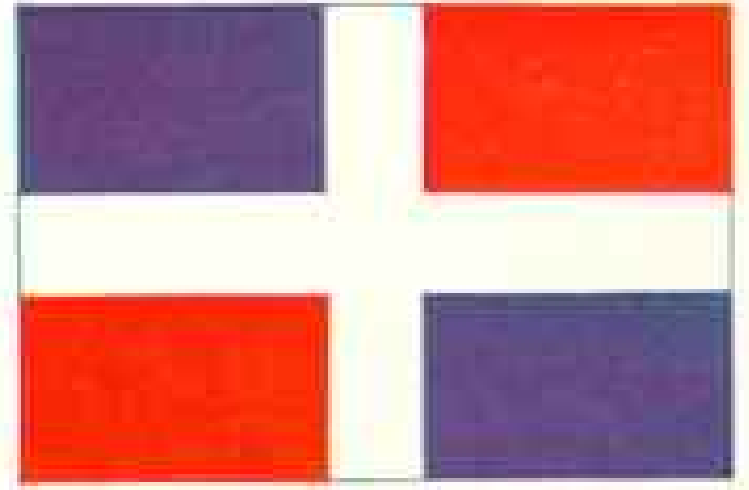
Denmark  
*National Flag, Merchant Flag*



Dominican Republic  
*National Flag*



Dominican Republic  
*Coat of Arms*



Dominican Republic  
*Merchant Flag*



Ecuador  
*President's Flag, National Flag, Ensign*



Ecuador  
*Coat of Arms*



Ecuador  
*National Flag for Municipal Buildings*



Ecuador  
*Merchant Flag*



Egypt  
*Royal Standard (Afloat)*



Egypt  
*Royal Standard (Ashore)*



Egypt  
*Royal Standard (Air)*



Egypt  
*National Flag, Merchant Flag*



Egypt  
*Ensign*



El Salvador  
*National Flag, Ensign*



El Salvador  
*Coat of Arms*



El Salvador  
*Merchant Flag*



Ethiopia  
*Royal Standard, 1931-1936*



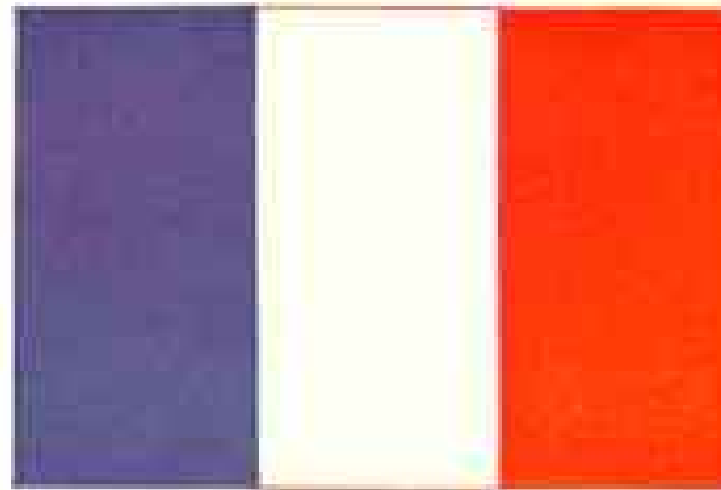
Ethiopia  
*Royal Standard, 1936-1941*



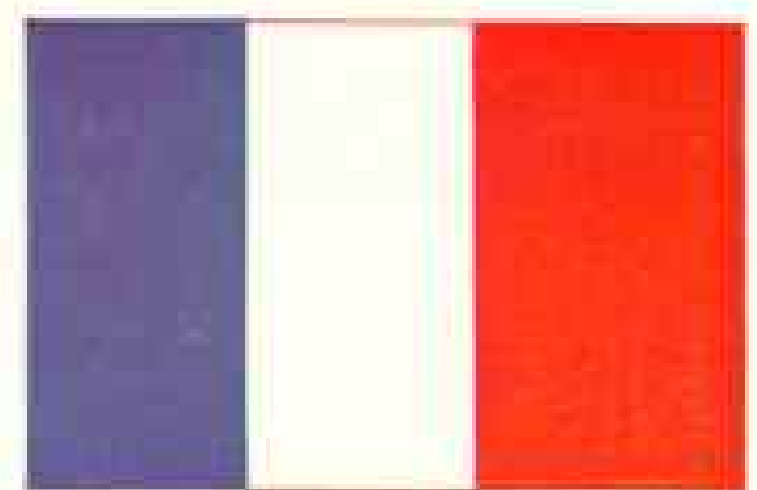
Ethiopia  
*National Flag*



France  
*President's Flag*



France  
*National Flag*



France  
*Ensign, Merchant Flag*



Greece  
*King's Personal Flag*



Greece  
*Royal Standard*



Greece  
*Royal Arms*



Greece  
*National Flag, Merchant Flag*



Greece  
*Ensign*



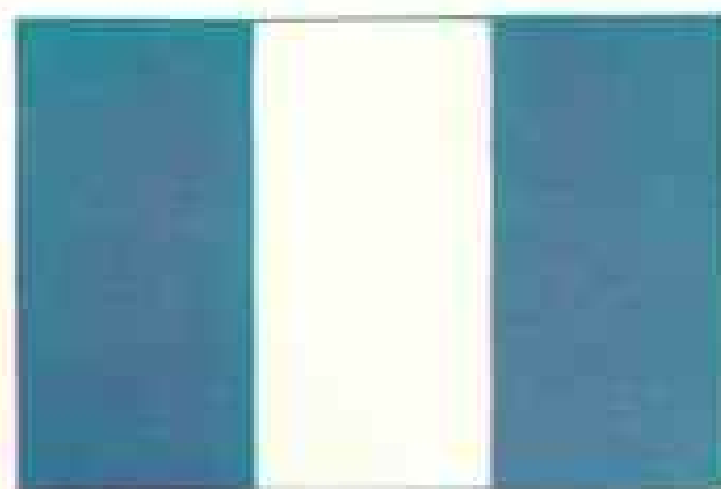
Greece  
*Fort Flag*



Guatemala  
*National Flag*



Guatemala  
*Coat of Arms*



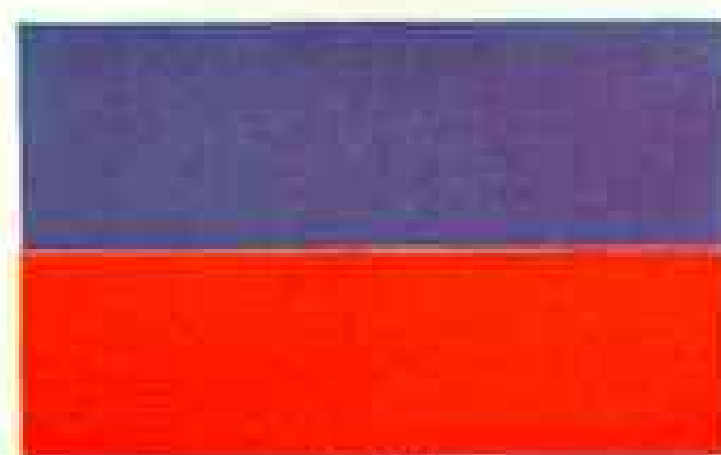
Guatemala  
*Merchant Flag*



Haiti  
*National Flag*



Haiti  
*Coat of Arms*



Haiti  
*Merchant Flag*



Honduras  
*National Flag, Merchant Flag*



Honduras  
*Coat of Arms*



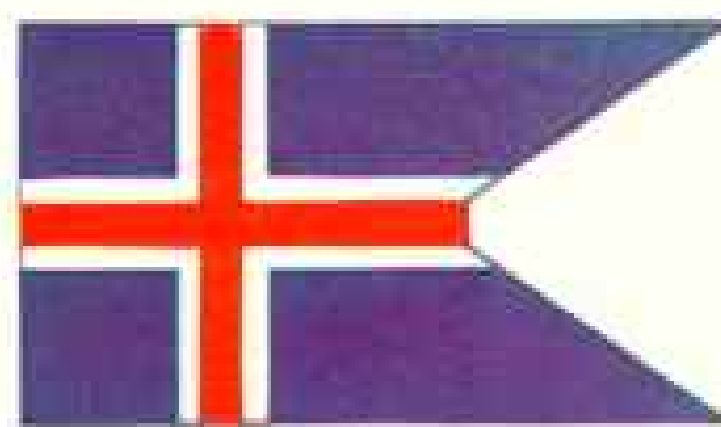
Honduras  
*Ensign*



Iceland  
*President's Flag*



Iceland  
*Coat of Arms*



Iceland  
*Government Flag, Ensign*



Iceland  
*National Flag, Merchant Flag*



India  
*President's Flag*



India  
*National Flag*



India  
*Ensign*



India  
*Merchant Flag*



Indonesia  
*President's Flag*



Indonesia  
*National Flag*



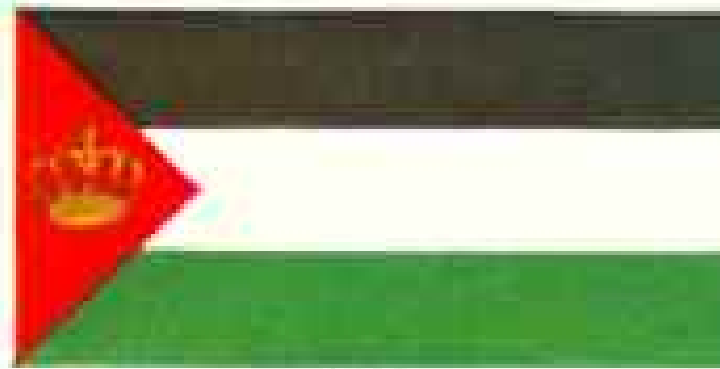
Iran  
*Royal Standard*



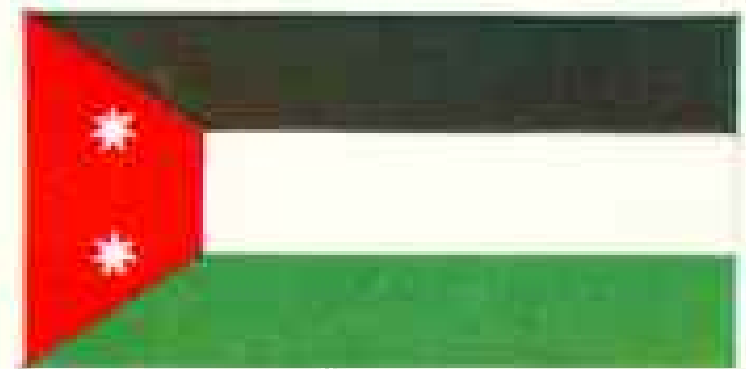
Iran  
*Government Flag*  
*National Flag, Merchant Flag—Plain Tricolor*



Iran  
*Ensign*



Iraq  
*Royal Standard*



Iraq  
*National Flag*



Israel  
*National Flag*



Israel  
*Ensign*



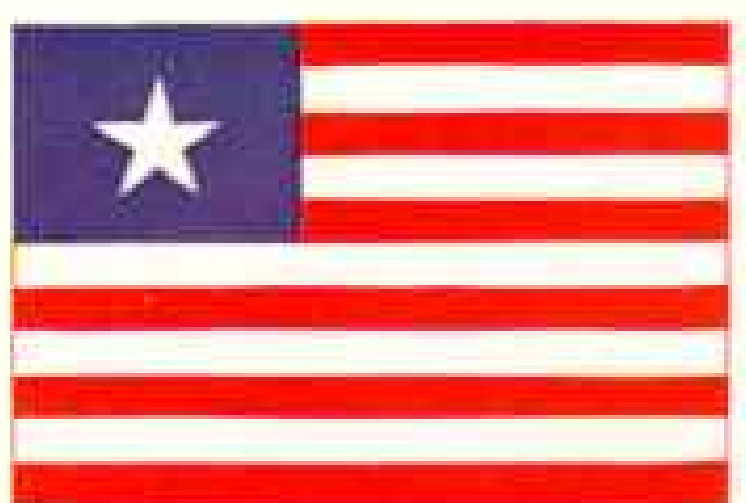
Israel  
*Merchant Flag*



Lebanon  
*National Flag*



Liberia  
*President's Flag*



Liberia  
*National Flag*





Luxembourg  
*Grand Duchess's Standard*



Luxembourg  
*Shield of Arms*



Luxembourg  
*National Flag*



Luxembourg  
*Military Flag*



Mexico  
*National Flag, Ensign*



Mexico  
*Coat of Arms*



Mexico  
*Merchant Flag*



Netherlands  
*Royal Badge*



Netherlands  
*Royal Standard*



Netherlands  
*National Flag, Ensign, Merchant Flag*



New Zealand  
*Governor General's Flag*



New Zealand  
*National Flag, Ensign*



New Zealand  
*Merchant Flag*



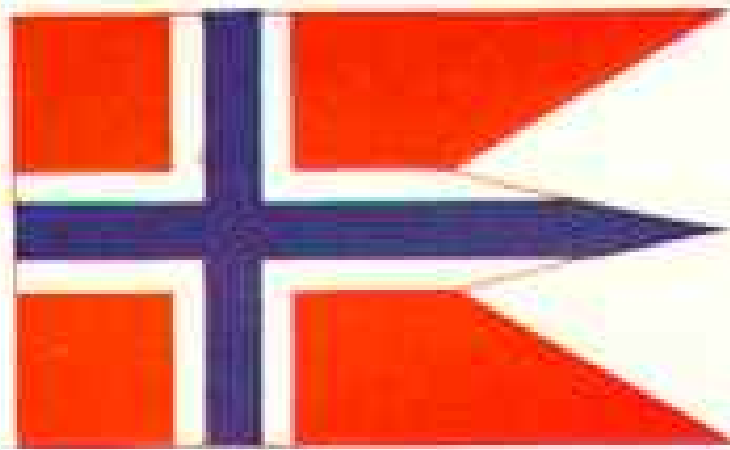
Nicaragua  
*Coat of Arms*



Nicaragua  
*National Flag, Ensign, Merchant Flag*



Norway  
*Royal Standard*



Norway  
*Government Flag, Ensign*



Norway  
*National Flag, Merchant Flag*



Pakistan  
*Governor General's Flag*



Pakistan  
*National Flag*



Panama  
*National Flag, Ensign, Merchant Flag*



Paraguay  
*Coat of Arms*



Paraguay  
*President's Flag*



Paraguay  
*Treasury Seal*



Paraguay  
*National Flag, Ensign, Merchant Flag*



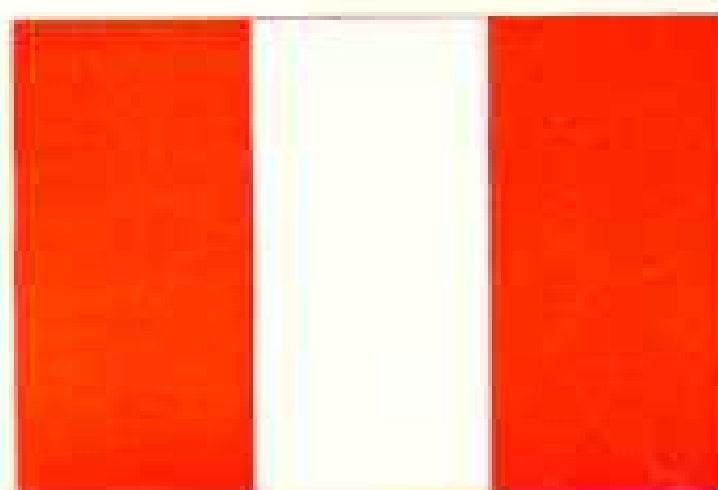
Peru  
*President's Flag*



Peru  
*National Flag, Ensign*



Peru  
*Coat of Arms*



Peru  
*Merchant Flag*



Philippines  
*Badge*



Philippines  
*President's Flag*



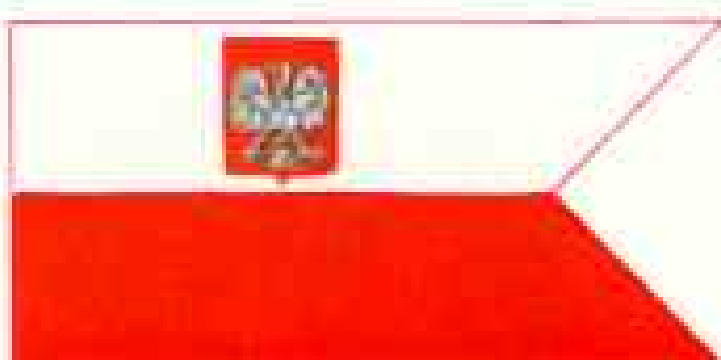
Philippines  
*National Flag*



Poland  
*President's Flag*



Poland  
*National Flag*



Poland  
*Ensign*



Poland  
*Merchant Flag*



Saudi Arabia  
*Royal Standard*



Saudi Arabia  
*National Flag*



Saudi Arabia  
*Ensign*



Saudi Arabia  
*Merchant Flag*



Sweden  
*Royal Standard*



Sweden  
*Royal Arms*



Sweden  
*National Flag, Merchant Flag*



Sweden  
*Ensign*



Syria  
*National Flag*



**Thailand**  
*Royal Standard*



**Thailand**  
*National Flag, Merchant Flag*



**Thailand**  
*Ensign*



**Turkey**  
*President's Flag*



**Turkey**  
*National Flag, Ensign, Merchant Flag*



**Ukrainian S. S. R.**  
*National Flag*



**Union of South Africa**  
*Governor General's Flag*



**Union of South Africa**  
*National Flag*



**Union of South Africa**  
*Ensign*



**U. S. S. R.**  
*National Flag, Merchant Flag*



**U. S. S. R.**  
*Ensign*



**United Kingdom**  
*Royal Standard*



**United Kingdom**  
*Royal Arms*

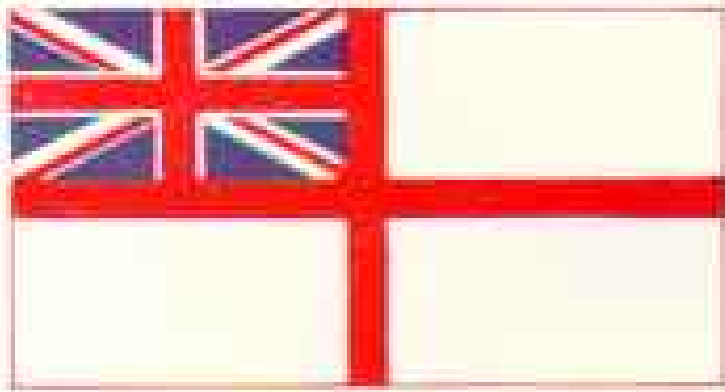


**United Kingdom**  
*Union Flag*



**United Kingdom**  
*Royal Crest*

The National Geographic Magazine



United Kingdom  
*White Ensign*



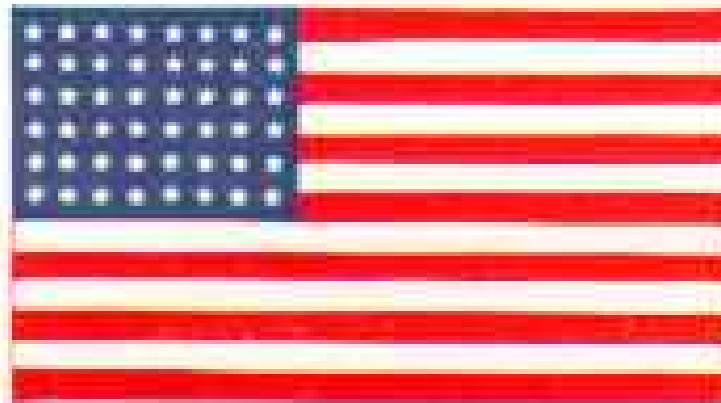
United Kingdom  
*Blue Ensign*



United Kingdom  
*Red Ensign*



United States  
*President's Flag*



United States  
*National Flag, Ensign, Merchant Flag*



Uruguay  
*President's Flag*



Uruguay  
*Coat of Arms*



Uruguay  
*National Flag, Ensign, Merchant Flag*



Venezuela  
*Coat of Arms*



Venezuela  
*President's Flag, National Flag, Ensign*



Venezuela  
*Merchant Flag*



White Russian S.S.R.  
*National Flag*



Yemen  
*National Flag*



Yugoslavia  
*National Flag*



Yugoslavia  
*Ensign*

white for the Ommlad Dynasty; black for the Abasside; and green for the Fatimid.

After World War I, King Hussein of the Hejaz led an attempt to unify the Arabs. He planned to have all the Arabian countries use the four historic colors, representative of the desire for unity. The flag he chose for the Hejaz (now part of Saudi Arabia) had the four colors but no stars; Transjordan-Palestine was to have one star; Iraq, two stars; Syria-Lebanon, three.

King Hussein's son, Faisal, was later elected King of Iraq. When the Iraqi Constitution was adopted, it included the National Flag with the two stars as originally devised.

**Israel, page 227.** The flag of Israel adopted in 1948 was based on the Zionist Flag which originated at the First Zionist Congress held in Basel, Switzerland, in 1897. The Israeli Flag, however, uses a darker shade of blue and has definite proportions, whereas the Zionist design varied greatly in the width of stripes.

The Ensign and Merchant Flag are variations on the design of the National Flag.

The blue and white recall the colors of the ceremonial garments ordained in the Bible at the time of Moses. The high priests in ancient times used the same colors for their official robes.

The "Magen David" or "Shield of David" (sometimes called also the "Star of David"), although originally without Jewish associations, has become a traditional Jewish symbol.

**Lebanon, page 227.** An autonomous province of the Ottoman Empire, with international guarantees of its autonomy after 1864, Lebanon was occupied by the British and French armies in 1918. It became a French Mandate in 1922. Four years later it was declared a republic, under French protection. Complete independence was achieved in 1943, at which time a committee of the parliament selected the Lebanese flag.

As a French Mandate, Lebanon used the French Tricolor with a cedar of Lebanon in the center. As an independent country, Lebanon adopted a red-white-red horizontal stripe, but retained the cedar, symbol of holiness, eternity, and peace, and mentioned many times in the Old Testament.

**Liberia, page 227.** The American Colonization Society was founded in 1816 to colonize in Africa free negroes from the United States. The first settlement was made in 1822. The name "Liberia" was adopted in honor of its freedom. By 1847 the colony was declared an independent republic. Ten years later it absorbed "Maryland in Liberia," a similar colony started at approximately the same time.

The President uses a flag with a shield based on the National Flag.

Maryland in Liberia had chosen the Flag of the United States, replacing the stars in the canton with a white equal-armed cross. But the flag adopted by Liberia, though similar to that of the United States, has 11 stripes, one for each

signer of the country's Declaration of Independence. The star represents the only free Negro state in Africa. The three colors honor the three divisions of Liberia in 1847, when the flag was chosen.

**Luxembourg, page 228.** The Grand Duchess of Luxembourg uses a flag with her personal coat of arms on the obverse. The lion of Nassau (see Netherlands, below) is in the first and fourth quarters; the lion of Luxembourg in the second and third. The shield, never used without the crown, is depicted to show detail. The reverse is the National Tricolor. The flag is edged with a blue cord. The arms of the Grand Duchy carry only the red lion of Luxembourg.

The colors of the National Flag date from 1235, when a red lion on a white field with blue stripes was adopted as a coat of arms by the Counts of Luxembourg. This design was used until the end of the 18th century. Luxembourg recovered its independence in 1839, but shared a ruler with the Netherlands until 1890. An official circular in 1845 approved the present flag. The similarity to the Netherlands flag has led to the unofficial use of the National Arms on the white stripe. The Military Flag has been used since 1853.

**Mexico, page 228.** The present design of the Mexican flag was adopted in 1823; it was based on the "Flag of the Three Guarantees," adopted upon independence from Spain in 1821. The Guarantees are symbolized by white, religion; green, independence; red, union.

Variations in the execution of the arms over the years were terminated in 1916 when the original design was officially restored. According to Aztec tradition, the god Mexitli warned the people not to establish a permanent residence until they arrived at a place where they would find an eagle with a serpent in its beak, standing on a nopal sprouting from a rock protruding from water.

After 165 years of hardships and wandering, the Aztec people, in 1325, saw an eagle on a rock in Lake Texcoco. So they founded their new home on the lake shore, naming it Tenochtitlán (the place of the cactus pear) or México, the place of Mexitli, their god.

**The Netherlands, page 228.** The Royal Standard carries a badge made from the shield of the Royal Arms. Adopted in their present form in 1907, the arms have been substantially the same for centuries. A lion with seven arrows representing the original seven United Provinces of the Netherlands was used in the 16th century.

Fighting under a horizontal tricolor of orange, white, and light blue, the colors of the arms of Prince William of Orange, the Dutch revolted against Spain late in the 16th century. Thus the Netherlands Flag had its origin in the so-called *Prinsenvlag* ("Prince's Flag"). Early flags were made in a variety of patterns, now standardized into the horizontal tricolor. After 1630 orange



### Old Glory Rises in Seoul under Sniper Fire

When UN forces took Seoul in September, Marine Private Luther R. Leguire raised the Stars and Stripes over the United States Embassy. A sniper opened fire. American rifles went to the ready, but the commanding officer ordered one man to attend to the interruption. "One sniper, one Marine," he said. Detecting the sniper, the Marine tumbled him off a roof.

was replaced by red and the light blue by dark blue. It is a custom to fly an orange streamer superior to the National Flag as a sign of loyalty to the Royal House, Orange-Nassau.

**New Zealand, page 228.** His Majesty's Governor General uses the Royal Crest on his flag (page 231).

The present New Zealand flag originated in the design adopted in 1867; this was the British Blue Ensign (page 236) with the letters "N. Z." in red outlined with white in the fly.

The design as used today, the Blue Ensign with stars representing the Southern Cross, was adopted for Government vessels in 1869. In 1902 this was made the National Flag, and its use thereby extended to citizens. The flag was unchanged when New Zealand attained Dominion status in 1907.

Australia also uses the Southern Cross (page 221), but the designs are easily distinguished.

**Nicaragua, page 228.** The flag of Nicaragua is based on that of the United Provinces. (See Costa Rica, page 218.) While this design has served officially as the National Flag, Ensign, and Merchant Flag since 1908, an unofficial flag with a blue anchor on the white stripe occasionally appears as the "Merchant Flag."

**Norway, page 229.** The Royal Standard carries the lion from the Royal Arms. The arms have been used with only minor changes since the 13th century. The lion holds the ax of the nation's patron Saint, St. Olav, King of Norway at the beginning of the 11th century.

From 1381 until 1814, Norway was united with Denmark and used the Dannebrog as its National Flag (page 218). In 1814 Norway separated from Denmark and became an independent country, but united with Sweden. This union lasted until 1905. The present National Flag was adopted in 1821, but it was used with a "Union Mark" in the canton from 1844 until 1898. The present Ensign was adopted in 1844, and it carried the Union Mark until 1905. Norwegian flags are based on the Dannebrog, but add a blue cross to signify Norway's independence.

The Government Flag is also the Ensign and is used exclusively on government property and by the navy.

**Pakistan, page 229.** His Majesty's Governor General, like the Governors General of the other Commonwealth countries, flies a flag with a Royal Crest (page 231). Unlike the flags used in Australia, Canada, etc., the flag for Pakistan has the name placed directly on the field rather than on a scroll.

The National Flag of Pakistan was adopted on August 11, 1947, by the Pakistan Constituent Assembly at Karachi, and raised officially four days later when Pakistan acquired its independence within the Commonwealth of Nations.

The flag combines a white stripe for the non-Moslem minorities in Pakistan and the green flag with its white star and crescent, which had been the flag of the All-India Moslem League since 1906. Green is a color traditional to Moslems. The crescent and star are popular symbols among Mohammedans.

**Panama, page 229.** Since Panama, unlike the other countries of Central America, did not join the United Provinces when it gained its freedom in 1821, its flag is distinctive. (See Costa Rica, page 218.) White represents peace; red and blue,

liberal and conservative parties; stars, faith and strength in the future.

**Paraguay, page 229.** This country is the only one in the entire United Nations which has different designs on the obverse and reverse of its National Flag. The obverse shows the coat of arms with the "Star of May," which represents the morning star shining the night of May 14-15, 1811, when Paraguay declared its independence. The reverse carries the design of the Treasury Seal with a lion and a liberty cap.

**Peru, page 229.** The coat of arms, recently redrawn, differs slightly from the design pictured in "Flags of the Americas" (NATIONAL GEOGRAPHIC MAGAZINE, May, 1949). Most conspicuous change is omission of the large wreath on the flags supporting the shield, when the arms are used alone. On the National Flag, however, the wreath substitutes for the supporting flags. Llama and cinchona are native to the country. Laurel crowns and crest honor Lima, the "City of the Three Kings."

**Philippines, pages 229-230.** The President's Flag carries a badge composed of the eight-rayed sun and three stars found on the National Flag and Arms and a sea lion, used on early coats of arms. The sea lion traces its ancestry to the arms of Manila bestowed by Spain in 1596.

The Philippine flag of today was adopted in 1898. It combines features of early revolutionary flags. The stars represent geographic divisions—Luzon, the Visayas, Mindanao. The sun, the light to lead the way to freedom, has eight rays to honor the first provinces which rose against Spain. When made of silk, the flag has a gold fringe. During a war, the flag is flown with the red stripe above the blue.

During the early years of American occupation, the display of the Philippine flag was prohibited. In 1919 the use of the flag was restored, and when the Philippines attained Commonwealth status in 1935, it was adopted by the Constitution. It was displayed jointly with the Flag of the United States until July 4, 1946, when the country became fully independent (page 219).

**Poland, page 230.** The Polish eagle, used on that country's flags, first appeared on the seal of the Polish Prince Leszek Biały in 1278. The white eagle on a red background appeared in 1241 in an emblem on the tomb of Prince Henryk Pobożny (Henry the Pious). This combination of colors is the source of the red-and-white of the Polish flag. Military units used the colors early in the 15th century.

After the third partition of Poland in 1795, the red-and-white flag and the white eagle on the red field disappeared from the international scene. The Polish flag was flown, however, in 1794 during the uprising of Kościuszko, and again in 1830, 1848, and 1863, during other Polish uprisings. It came back as a National Flag after

World War I, when Poland was again independent. Since World War II, the crown which formerly adorned the eagle's head has been removed.

**Saudi Arabia, page 230.** During World War I, the Hejaz threw off the control of Turkey. In 1926 Ibn Saud, the Sultan of neighboring Nejd, conquered the Hejaz. He combined the two as the Kingdom of Saudi Arabia. Until recently, the King used a green flag with a scimitar at the bottom and the "Word of Unity" above it.

At present the King flies a flag with two crossed swords, the sword being a traditional symbol with the Arabs. Above the swords is the Arabic Word of Unity (There is no God but God and Mohammed is His Prophet).

The National Flag differs from the Royal Standard only in proportions. The Merchant Flag is unique in that it is triangular in shape; the Word of Unity is omitted on this flag.

**Sweden, page 230.** The Royal Standard carries the Royal Arms as a badge.

The main shield is divided by the cross. The first and fourth quarters have three golden crowns for Svealand; the second and third have a gold lion superimposed on three bends sinister in silver for Gotland. The inescutcheon (little shield) has a sheaf (vase), introduced into the Royal Arms by Gustaf Vasa who was elected King in 1523 after freeing his country from Denmark. A bridge over a river, surmounted by an eagle and the constellation of Charles's Wain, was the arms of Pontecorvo. Napoleon in 1806 gave Pontecorvo, an enclave in the Kingdom of Naples, to Marshal Bernadotte, founder of the present Swedish dynasty.

According to legend, the Swedish King, St. Erik, during his crusade to Finland in 1157, knelt in prayer before battle. Looking up, he saw a beautiful cross radiating from the sun in the blue sky. This revelation formed the basis for his country's flag. The flag was not officially used until the reign of Gustaf Vasa.

The Ensign is used by all the Swedish armed forces.

**Syria, page 230.** Syria was a province of the Ottoman Empire until 1918. At the end of World War I, Faisal, proclaimed King of Syria, attempted to set up an independent Syria. But the League of Nations in 1922 proclaimed the country an independent state under French Mandate, and Faisal went to Iraq (page 233).

Syria became a republic in 1928. The independence of Syria, proclaimed in 1941, was made effective in 1946.

The present flag was drawn by the Constituent Assembly in 1928 and raised officially in Damascus the same year. The flag is based on the one used by King Faisal in 1920 when he tried to establish "Independent Syria."

Green represents the Fatimid, white the Omiad, and black the Abasside Caliphates. The three red stars may represent the Arab blood



shed in revolutions for Arab independence. A recent report states the President uses the National Flag square with a gold fringe.

**Thailand, page 231.** The Royal Standard of Thailand (formerly called Siam) carries the Garuda, which according to Indian mythology is the mightiest of all the birds. It was on the back of the Garuda that the God Vishnu rode.

The National Flag, established in 1917, is the *Trai-ranga* (Tricolor) Flag. The colors have had several interpretations. The one generally accepted is that blue represents the traditionally official color; red, the *Kshatriya* (warrior or ruling class); white, purity.

A white elephant, used on Thai flags for many years, appears on the Ensign. In ancient times, the power and prestige of kings was judged by the number of sacred white elephants they had in their kingdoms.

**Turkey, page 231.** Based on the National Flag, the President's Flag carries a golden sun whose rays terminate in 16 gold stars.

Several legends attempt to explain the origin of the star and crescent found on most of the many flags used in Turkey's long history. The crescent was the symbol of Istanbul from early times. A beneficent crescent moon revealed the attempts of Philip of Macedon to undermine the city walls in 339 B. C., according to one account. Another says that when Mohammed II conquered the city in 1453, he added the city's crescent to his plain red flag as a symbol of goodwill to the conquered people.

The star, which in recent years has been five-pointed, presents equal difficulties. The briefest explanation is that it is *Al Tarek*, the morning star, mentioned in chapter 86 of the *Koran*. Some writers have suggested that Richard the Lion-Hearted had a star and crescent badge in the Crusades and that the Turks added the star to their own crescent, perhaps not realizing that it was the Star of Bethlehem.

**Ukrainian Soviet Socialist Republic, page 231.** For some years the Ukraine used a flag similar to that of the U. S. S. R., but late in 1949 the Presidium of the Supreme Council (Soviet) of the Ukrainian S. S. R. announced the adoption of a new flag. Blue and yellow were the historic colors of the Ukraine. The Soviet symbols of hammer, sickle, and star appear on the flag. (See U. S. S. R.)

**Union of South Africa, page 231.** In addition to the Royal Crest (page 237), the flag of His Majesty's Governor General uses the name of the country in both English and Afrikaans, the two official languages.

In 1927 the Union of South Africa adopted a National Flag of orange, white, and blue stripes like the "*Prinsevlag*" under which the Netherlands won their independence (page 235). Although the orange had been replaced by red, this is the basic flag which was used by Jon Van

Riebeeck when the first European settlement was founded at the Cape of Good Hope in 1652.

The badge in the center of the National Flag is a combination of the "Union Jack" (below), the old Orange Free State Flag, and the *Vierkleur* (Four-Color). The "Union Jack" represents the former Crown Colonies of the Cape and Natal.

The Orange Free State Flag represents that area when it was a Republic. The *Vierkleur* was used in the Transvaal when it was the independent South African Republic.

Unlike the other Dominions, which use the British White Ensign for their Naval Ensign, South Africa has its own design, adopted in 1946.

**Union of Soviet Socialist Republics, page 231.** At first the flag of the U. S. S. R. carried initials for the country's name but later adopted the symbols in the canton. The crossed hammer and sickle signify the union of factory and agricultural workers. The star signifies the authority of the state.

Each of the 16 Union Republics forming the U. S. S. R. has a flag. (See Ukraine, above, and White Russian S. S. R., page 238.)

The Ensign was adopted in 1935.

**United Kingdom, pages 231-232.** The Royal Standard of the King of the United Kingdom of Great Britain and Northern Ireland consists of the four quarters taken from the shield of the Royal Arms. The first and fourth represent England; second, Scotland; and third, Ireland.

The Banners of St. George, England, and St. Andrew, Scotland, were combined originally in 1606 to form the first version of the Union Flag. This was reaffirmed with the Parliamentary Union of England and Scotland in 1707. The second and present version of the Union Flag was adopted with the union of Great Britain and Ireland in 1801, when the so-called Cross of St. Patrick was added.

Although, strictly speaking, the Union Flag is a Royal Flag, it has come to be regarded and used as the National Flag *on land*. It is more commonly known as the "Union Jack," but correctly speaking it should be referred to as such only when it is worn at the jack staff, i. e., as a "Jack" in the bows of ships of war.

England has three historic Ensigns, all of which carry the Union Flag in the canton. The White Ensign is the flag used by armed vessels of the Royal Navy, by both the United Kingdom and the Commonwealth countries, except the Union of South Africa.

The plain Blue Ensign is worn by merchant ships commanded by Royal Naval Reserve Officers holding an Admiralty Warrant. Ships in the employ of public offices, etc., wear the Blue Ensign with the appropriate badge in the fly. For additional uses of this Ensign, see Australia, Canada, and New Zealand.

The Red Ensign is the Merchant Flag; it is properly flown as the National Flag of all private citizens afloat. The Dominions and some of the Colonies have distinctive *charges* in the fly of

the Red Ensign. For Canada's unique use of the Red Ensign see page 216.

The Royal Arms show the derivation of the Royal Standard. The Royal Crest is used on the flags of His Majesty's Governors General of Australia, Canada, New Zealand, Pakistan, and the Union of South Africa.

**United States, page 232.** The President of the United States uses a flag carrying his coat of arms as adopted in 1945. The legend carried on the arms is the motto *E Pluribus Unum*, "One Out of Many." The stars represent the 48 States.\*

Britain's American colonies declared their independence on July 4, 1776. A year later, June 14, 1777, a flag was adopted. In the stress of the times, the flag resolution received scant attention. First public notice so far discovered appeared in a Pennsylvania paper two months later.

Two stars and two stripes were added in 1795 in recognition of the admission of Vermont and Kentucky to the Union. In 1818 a third flag law provided for the return to the original 13 stripes and for the addition of a star on the July 4 following the admission of each new State. In 1912 President Taft prescribed the arrangement of the stars and established the proportions of the flag when used by the Government and by the armed forces; both points were confirmed by President Wilson in 1916. Proportions for private use, and for use as the country's Merchant Flag, have never been officially prescribed.

The United States House of Representatives has approved statehood for Alaska and Hawaii and Senate action on this legislation is now pending. Their admission would be followed by the addition of stars to the Flag in accordance with the law of 1818. Citizens have suggested many patterns for a 50-star flag, but no official design has been announced.



EUA

#### A Greek Girl Displays a "Plan Marshall" Flag

Dowsley Clark, of the Economic Cooperation Administration staff in Athens, designed the emblem. It flies from ECA's *Showboat*, which plies Greek waters, explaining the scope of American aid.

**Uruguay, page 232.** The nine stripes on Uruguay's flag represent the political divisions of the country when the flag was established. The "Sun of May" symbolizes the country's independence. Sun and colors show the country's former relationship with Argentina.

The arms show a scale for equality and justice; the Mountain of Montevideo with a fortress at the top, strength; a horse running free, liberty; an ox for plenty in a cattle-raising country.

\* See "Seals of Our Nation, States, and Territories," by Elizabeth W. King, NATIONAL GEOGRAPHIC MAGAZINE, July, 1946.



### Massed Flags Highlight Observance of the United Nations' Fifth Anniversary

Colors of member nations form a backdrop for speakers at a session of the 1950 *New York Herald Tribune* Forum on UN's birthday, October 24. Newest member of UN is Indonesia, admitted September 29, 1950 (page 215). The large gold map-medallion is the Forum's emblem.

**Venezuela, page 232.** Francisco Miranda, "Precursor of Independence" in South America, designed a yellow, blue, and red flag for his use in 1806. Simón Bolívar carried this combination so consistently that it is sometimes called "Bolívar's colors." Both Colombia and Ecuador use flags derived from this source.

Wheat stalks on the arms symbolize the union of the provinces and fertility of the soil. The untamed horse is for independence. The ribbons are inscribed in Spanish "April 19, 1810—Independence," "February 20, 1859—Federation," and "The United States of Venezuela."

**White Russian Soviet Socialist Republic, page 232.** This member of the Soviet Union has a flag similar to the flag of the U. S. S. R. (page 231). The Cyrillic letters B. S. S. R. for Byelorussian (White Russian) Soviet Socialist Republic appear beneath the hammer and sickle."

**Yemen, page 232.** For centuries Yemen used a red flag with characters on it to symbolize virtues to which Moslems and Yemeni aspired. But in 1927 this flag was given to the royal guard and a new flag was adopted as the National Flag.

The five stars represent the five natural geographic divisions of Yemen; they also recall the five dogmas of Islam and the five times a day the prayers are recited by the faithful. The saber, widely used as an emblem by Arabs, and the red field on which it is placed, are reminders to the people of the blood they have sacrificed in the defense of the liberty and independence of their country.

**Yugoslavia, page 232.** When Yugoslavia was formed after World War I, its flag was a horizontal tricolor, based on the flags of Montenegro, Serbia, and Croatia.

During World War II the Yugoslav Partisans used a red star as an emblem, and this star is perpetuated in the coat of arms and flag adopted by the country, now the Federal People's Republic of Yugoslavia.

The red now stands for the battles of a people who were under foreign rule for centuries; white, the justice of the battle; blue, faith in final victory. The wreath around the star on the Ensign is similar to the one used in the insignia of the Order of the Partisan Star, first class.

The six republics forming the F.P.R.Y. all have flags.

# Sea Birds of Isla Raza

By LEWIS WAYNE WALKER

*With Illustrations from Photographs by the Author*

**I**SLA RAZA is not famous. In fact, it isn't even a speck on most maps that show the Gulf of California. Not a soul lives there, but it teems with life. Its desolate rocks ring with the cries of numberless nesting birds.

From the lonely Gulf, flyers and fishermen brought back tales of an island alive with wings, one that would rank with the better-known sea bird cities of the world.\*

Despite its huge population of birds, Raza had been explored by only a very few ornithologists; so, with a friend, I decided to visit the tiny island in the middle of nowhere and yet so close to the United States.

In a surplus Marine Corps reconnaissance car, we traveled 400 miles from San Diego to Angeles Bay (Bahía de los Angeles) in Baja California, Mexico (map, page 240). Here we learned why so little was known about Isla Raza and other Gulf islands.

## Get-Out-if-You-Can Island

Even in fair weather the area is treacherous and inhospitable. High winds sweep off the peninsula of Baja California. Currents clocked sometimes at a speed of eight knots swirl between the islands and create immense whirlpools in otherwise placid waters. From high to low tide there is a drop of 12 to 30 feet. This shifting, surging mass of water prompted an early explorer to name a near-by island Salsipuedes, or "Get Out if You Can."

Thirty miles east of Raza, Tiburón, largest island in the Gulf, lifts high above the horizon. This is the last stronghold of the once warlike Seri Indians. Even to the present day, the pitiful remnants of the tribe are feared by local fishermen.

Fresh water is another problem that besets the traveler. Although mountainous, most of the Gulf islands are parched and arid. Forty miles northwest on the peninsula lies Angeles Bay, the Gulf's most beautiful and best protected bay. Here is the only fresh water for many miles around.

At Angeles Bay we got together additional provisions and recruited oarsmen from a turtle camp 100 miles to the north. After they arrived, paddling an ancient, well-patched dugout canoe, we loaded our equipment into the boat that would take us to Raza.

We boarded with trepidation. Most pretentious in the Angeles Bay fleet, the craft

was 25 feet long with a 9-foot beam. But, except for a few special parts, it was home-made from flotsam of the Gulf. Any pressure against the inside of the hull brought water through cloth-filled cracks (page 247).

On the second day we reached Isla Raza. Insignificant in comparison with the mountainous islands looming on the horizon, Raza is low, barely reaching 100 feet at the highest point, and is less than a mile square (page 247). In stormy weather, we were told, foam and spindrift blow completely over it.

Vegetation is sparse. Hardy saltweed, or salicornia, dots some large tidal flats. There are a few dense patches of cholla cactus, but large boulders cover the rest of the landscape.

## Gulls Swell Up and Down Like Ocean

White-headed, aristocratic Heermann's gulls were all about, perched on rocks, incubating eggs, or in flight (page 241). Gull nests can be found at least every 20 feet over the entire island. In some areas they are crammed together less than a yard apart.

To a distant observer, a person walking through a Heermann rookery creates the effect of an ocean swell made up entirely of birds. Gulls 20 to 30 feet ahead rise above their eggs as the intruder nears, hover directly overhead until he has passed, then drop to their nests.

As the person progresses across acre after acre, thousands of birds stand, lift, and drop in unison, creating one of the most beautiful sights I have ever witnessed in my ornithological work.

Strangely enough, these birds, so tame at their Gulf rookeries, change temperament when they migrate to California at the close of the breeding season. A few possibly cross the peninsula where it narrows to about 40 miles. But most of them supposedly fly 450 miles south to Cape (Cabo) San Lucas, at the southernmost tip of Baja California. There they turn north and, after a journey of 800 to 1,000 miles, reach the Pacific coast of the United States.

Some of the migrants move southward as far as Guatemala, but most of them stream northward along the coast and are common winter birds of California, Oregon, Washing-

\* See, in the NATIONAL GEOGRAPHIC MAGAZINE: "Blizzard of Birds: The Tortugas Terns," by Alexander Sprunt, Jr., February, 1947; and "Sea Bird Cities Off Audubon's Labrador," by Arthur A. Allen, June, 1948.



Drawn by Harry K. Oliver and Erika E. Almon.

### Raza: Bird City on an Uninhabited Isle

Less than a mile square, the island in Gulf of (Golfo de) California is so unimportant that most continental maps ignore it. Boulders, saltweed, and cacti compose its dreary scenery. This very monotony favors a bird colony, which finds security against ordinary risks. Egg robbers, however, pillage the rookeries at times.

ton, and Vancouver Island. Here they leave the beaches at the first sight of man and spend much of their time riding the breakers a quarter-mile from shore.

In setting up our collapsible blinds for photographic work, we tried without success to find a spot where they could be placed without disturbing nesting birds. We were finally forced to move several sets of eggs.

Ten minutes later the birds, having waited a few yards away, walked back to their homes and settled upon their nests, seemingly unconcerned about the strange canvas structure. Owners whose eggs had been moved, however, were baffled. They discovered them in new locations, sat on them for a few minutes, then walked to the blind that hid the original sites. One even stuck its head inside before accepting its new nest position.

### Ceremony of Changing Shifts

Within an hour the life of the colony was going on just as it had when the nearest human was 50 miles away. Birds returning from the Gulf sidled up to their mates with stick, pebble, or feather in beak. Those to be relieved picked up these offerings ceremoniously, tucked them under breast feathers, then moved aside to let the newcomers take over home duties.

Throughout the entire rookery these changes were constantly being made as returning mates

drifted in, singly or in small groups. The birds instinctively knew the killing power of noontime sun on their eggs and young and kept them covered during the heat of the day.

Generally, the gull family is notorious for nest robbing and will usually eat the eggs or young in any unguarded nest. Gulls even raid nests of their own species. The Heermann's gulls of Raza, however, seem to have a code of ethics which prohibits them from eating eggs or young of their own kind.

### Nest Sites, Not Eggs, Recognized

A long, narrow valley bisects the north-eastern side of Raza. As we came over its side ridges, we were forewarned by a deafening clamor that something really different was in store, but no one could begin to picture the colony of nesting terns that burst into view.

At the bottom of this secluded depression the birds were spread out like a silvery blanket, packed so tight together that from this distance earth could not be seen between them. Others were milling overhead or landing on the backs of those below.

The large royals and the smaller elegants, the latter real natives of the Gulf area, mingled indiscriminately (pages 246, 248). The royals laid eggs similar in marking and usually two to the nest; the elegants laid only one, of extremely variable color and pattern.

These variations have led some ornithologists to advance the theory that the egg number and color pattern are used by adults for home recognition. I wanted to prove or disprove this theory.

Several eggs of elegant terns among the thousands near by were almost green. These we traded for ones not so distinctive in color and placed them in nesting depressions within arm's reach of the blind where the rightful owners of the nests were known to us. The owners of these depressions settled to incubation immediately without so much as a glance at the strange eggs under them.

Next, pairs were made of these green eggs and placed where only one egg had been before. Again the results were the same, the bird incubating the two without any sign of indecision. Even when the larger eggs of the royal were placed in elegant nests, and vice versa, the rightful owners of the site, not the eggs, took over.

For two full days I juggled these eggs from place to place until I became so confused I couldn't tell where they rightfully belonged; but the individual terns still resided on their original nests.

From far up this winding valley of terns came a steady roar of wings mingled with the



© National Geographic Society

241

Illustrations by Lewis Warner Walker

↑ **Heermann's Gulls, Raza's First Citizens,  
Take Tribute as Kings of the Rocky Isle**

These aristocrats of the gull family raid nests of neighboring terns (page 244). Tame on Raza, they become shy when they migrate after the breeding season. Most of them move to California; some stream as far north and south as Vancouver Island and Guatemala.

✚ **On the Same Lonely Island Dwell Two  
Sea Birds Peculiar to Baja California**

The booby (left) is the Brewster's, named for an American ornithologist. It resembles its first cousin, the white-bellied booby, which was probably the first bird seen in the New World by Columbus. A yellow-footed gull (right) guards her speckled eggs.





## It's Chow Time on Isla Raza: A Young California Brown Pelican Crowds Out a Brother and Disappears into His Mother's Gullet

Pelican parents take turns hatching eggs, providing shade, and feeding their young. A parent dives for fish, striking the water with great force and using its more than foot-long bill like a mechanical shovel. It partially digests the food, then regurgitates it for its youngsters. Impatient, Junior usually goes right to the source.

© National Geographic Society

24

Photographs by Loren Wagner Walker







© National Geographic Society

244

Illustration by Lewis Wallace Walker

♣ **Eaglelike Ospreys Build Huge Nests of Sticks and Weeds on Dominating Sites**

The wild-eyed, fierce-looking hawks are almost exclusively fish-eaters, catching their prey in lightning dives. They defend their nests with utmost courage. Nearly full-grown ospreys (right) have tested their wings and are about ready to leave their parents (left).

✦ **"Hey, Get Out of There!" Yelled Author. A Robber Gull Steals a Tern Egg**

While making tests to learn how birds recognize their own eggs, Mr. Walker saw what a peril nest-robbing Heermann's gulls are to a rookery. Before he could get out of his blind, the gull at right had eaten every egg not guarded by the aptly named elegant terns.





### Young Osprey Guards the Family Castle with Rauous Screams and Menacing Gestures

This tangled Isla Raza home points up an osprey habit. Long after the need of building materials has passed, parents gather sticks until fresh additions fall to the ground for lack of space (page 244). E. M. Blocher, director of the Fresno (California) zoo, inspected the nest, but did not take the young fish hawk. Not a soul lives on Angel de la Guarda, the 48-mile-long island in the background.

vocal din which accompanies any disturbance in a colony. Tracing the commotion, I found our boatmen squatting in the center of a milling mass of birds. A bucket of sea water was within reach.

#### Sea Water Tells Good Eggs From Bad

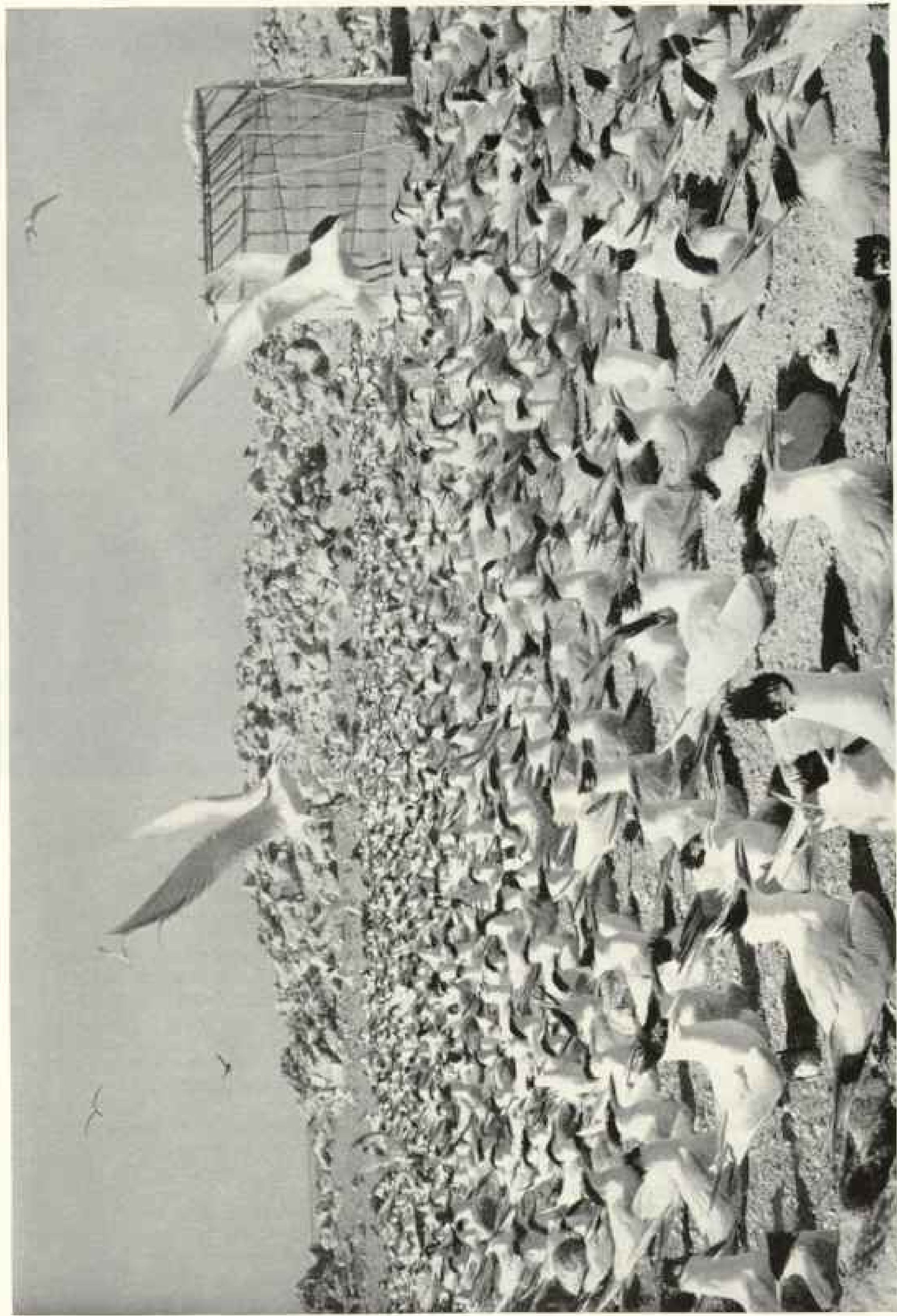
The men were lifting tern eggs from the nests and immersing them. If they floated, they were given back to the birds; but if they sank, they were packed in a box, to be eaten later. This use of specific gravity to determine development was an ingenious method of candling and was remarkably accurate.

Later I met a Mexican who told me he sold 27,000 Raza bird eggs in 1947 to the markets of Santa Rosalia. If big boats start plying their trade again, the birds of Raza will be in serious danger.

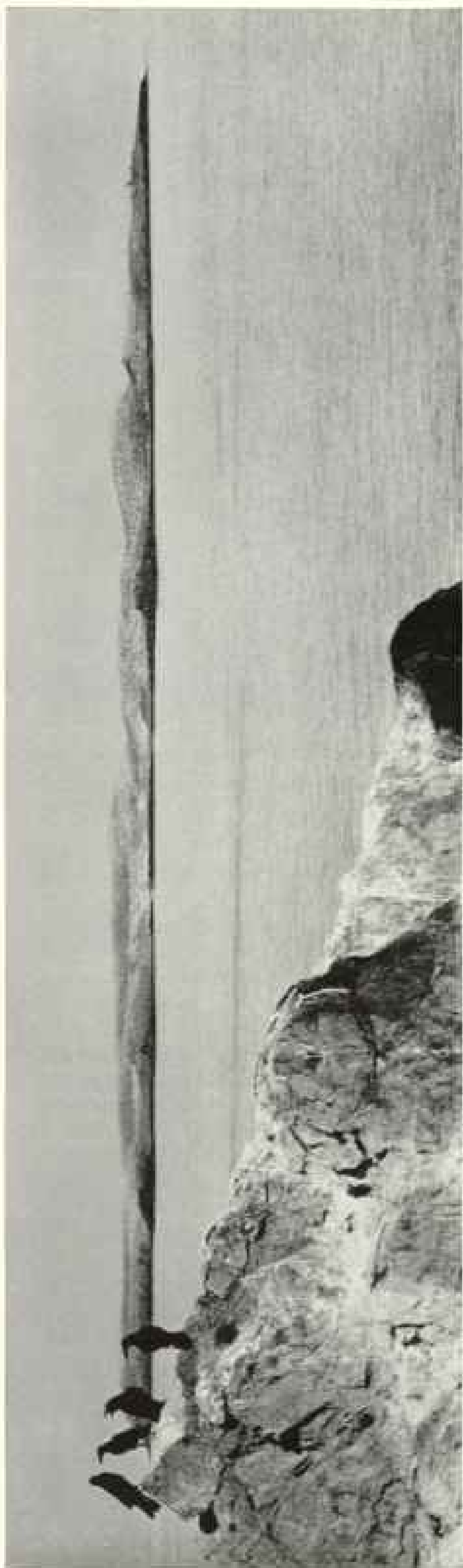
Since visiting my first sea bird colony, I had often wondered what controls the placement of eggs. Do birds just roam around and call the spot where eggs happen to be laid home? Or do they select some particularly suitable area in advance and guard it against encroachment? The egg collecting by our crewmen presented an opportunity for study along this line.

While the men were sorting in one section, I took pegs, poles, and string and marked off a 6-square-foot area. From the hillside I watched the birds return.

After becoming familiar with the birds, I drew a rough chart of the placement of the eggs and then called the crewmen. Within a few moments the edible eggs were on their way to the boat. Those showing a tendency to float were placed outside the square.

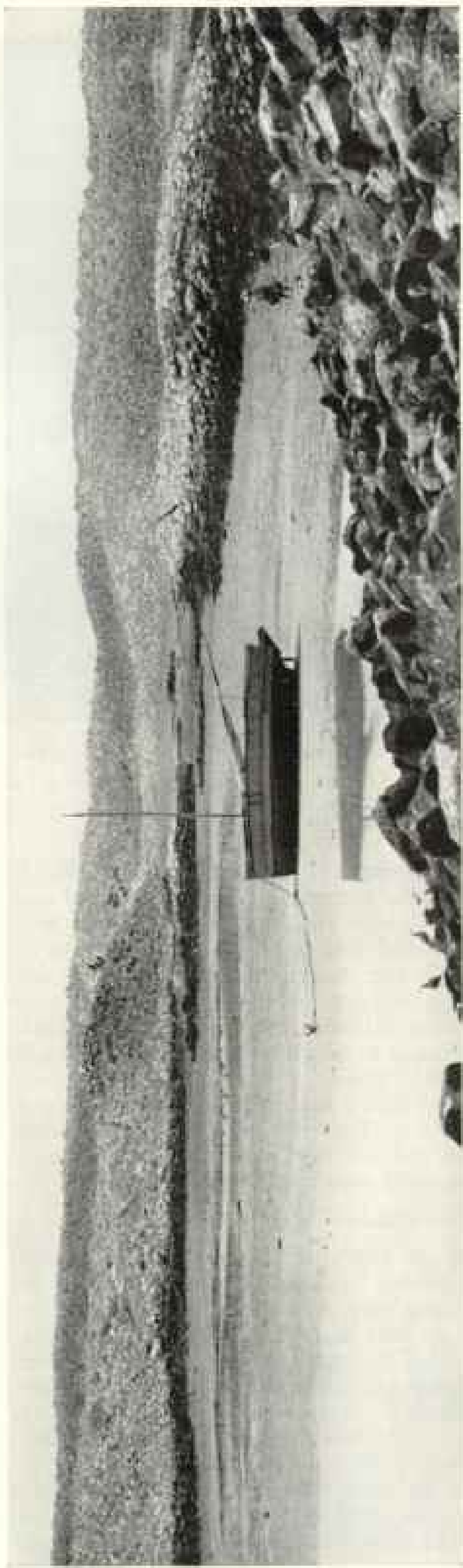


146  
Terns Face the Wind When Resting, Taking Off, or Landing. The Author Studied These Royals and Elegants from His Canvas Blind



**Distant Raza, Parched and Empty, Shows No Sign of Its Thousands of Winged Homesteaders**

Gull of California was calm when the picture was snapped from a neighboring crag. Within 10 minutes a storm sprayed the island with salty spume.



247

Bruce Mendenhall

**A Boat Built Out of Junk Carried the Author to Raza. Lacking a Breeze for Its Patched Sail, the Crew Rowed All the Way**

Any unusual pressure against the hull brought water gushing through cloth-called cracks. Low tide beaches the craft in Raza's only bay (page 239).



#### Raza's Bored Baby Sitters Relieve the Tedium with Harmless Sparring Matches

In this arid valley, birds and nests covered the earth so thickly that homecoming flyers sometimes landed on their neighbors' backs. Royal terns (recognized by their white-flecked brows, left) mingled with elegant terns (right) in cousinly tolerance (page 246). Like boys, they worked off excess energy in scuffles.

As we moved back, the terns fluttered to the ground in droves. Those bereaved of their eggs wandered about in one-foot circles. Some even poked their bills under neighbors to see if their eggs might have rolled. Then they complacently settled down, guarding the same domains as before, but obviously just waiting for Nature to take its course. New eggs would be laid in time.

Days later I again checked the area against the chart. The birds kept their former placement and held the still-bare ground against newcomers searching for nesting sites.

#### Tern Colony Raided by Egg Robbers

At one side of the main colony was a small flat isolated by rocks. On our first visit some 50 terns were seen patrolling the area, but no eggs were in sight. This group, completely encircled by predatory Heermann's gulls, was so small and insignificant that it was almost overlooked. Yet these pioneers gave us our only insight into the perils overcome by terns in establishing a rookery.

In the early morning of the second day a few eggs were seen under these terns, but, even as we watched, several were stolen by the picketing gulls. By late afternoon not an egg

remained. Nightfall brought an influx of layers, and morning found twice as many eggs dotting the ground. By dusk only a fractional number in the exact center of the plot had escaped the inroads of the egg-eating enemy.

The new colony had now gained a permanent foothold. The accordionlike growth continued—expansion during the night, contraction by evening. Each 24-hour period showed a gain for the terns and a corresponding retreat in the waiting ranks of hungry gulls.

In a mere week the colony had expanded from nothing to about 400 square feet of egg-spotted ground and continued to spread. Its steady growth had forced the gulls almost to the rock barriers hemming in the site.

At the end of our stay, it seemed that the gulls were not the rabid egg eaters they had been on our arrival. Like children sated with ice cream, they had found that a single diet can be overdone.

As we started our long row back to Angeles Bay, I envisioned Raza, in the not-distant future, as an island with eggs so nearly hatched that it would not pay for humans to make the water test, with gulls so glutted with yolk and albumen that they would once again concentrate on the fish teeming in Gulf waters.

# With the Nuba Hillmen of Kordofan

BY ROBIN STRACHAN

FRESH from Cambridge at the age of 22, I received my appointment from the British Foreign Office to serve the British and Egyptian Governments in the Anglo-Egyptian Sudan.

Many surprises were in store for me. The biggest, I think, was the size of the country, lying between Egypt on the north and Kenya, Uganda, and the Belgian Congo on the south, the Sudan covers almost a million square miles—about one-third the area of the United States. From south to north it is traversed by the River Nile (map, page 250).\*

The Sudan's population of some eight million is made up of Arabs; mixed descendants of the ancient Egyptians; Nilotes; and the many Negroid groups of the equatorial Provinces.†

With three other greenhorns I sailed from England for my new post at Rashad, in the Tegale district of Kordofan, one of the country's nine Provinces. I was considered the lucky member of the quartet because Rashad is a real bush station in the Nuba Mountains.

## Arabs and Nuba Live Side by Side

Tegale is a political district twice the size of the State of New Hampshire. Here live side by side a group of nomad Arab tribes adhering strictly to Islam, and Negroid tribesmen who, for want of a better generic term, are called Nuba. Their ways of life are different, but their problems have the same meaning for the British administrator.

There are also some semi-Arab Nuba. They took to Islam about 1890 and have become detribalized.

My first interview with the British Civil Secretary in Khartoum, capital of the Sudan, revealed that for a time I would be kept busy learning Arabic, law, and accountancy. I tried not to show my chagrin and kept quiet about my ambitions to hunt elephant.

Next my objective was El Obeid, capital of Kordofan and seat of the provincial administration. It lay three days' journey by train southwest of Khartoum.

El Obeid is steeped in the history of the Mahdi. I wonder how many of the thousands of American pilots who flew over the town during World War II, and sometimes landed there to refuel on their long haul to India, realized that, some 60 years before, this peaceful place had been the hub of one of the great revolts in history.

Mohammed Ahmed, a Dongola boat-builder's son, had proclaimed himself the

long-awaited Mahdi (Directed One). Villagers of Kordofan flocked to his banner. On January 17, 1883, he captured El Obeid and in the following November annihilated an army of 10,000 commanded by Hicks Pasha (Gen. William Hicks).

Within a few years his successors had wrested the Sudan from Egypt. The famous Gen. C. G. (Chinese) Gordon was killed when Khartoum was captured in 1885.

## Winston Churchill—Army Officer

Thirteen years later the reconquest of the Sudan, essential to secure control of the upper Nile, had been effected. Lord Kitchener won the historic battle of Omdurman in 1898. Winston Churchill, then a young officer with the 21st Lancers, inimitably described this final phase in his book, *The River War*. Since then the country has been a condominium, jointly administered by the Egyptian and British Governments.

The railway from Khartoum ends at El Obeid. The remaining 150 miles of the journey to Rashad is by road, on horseback with pack mules during the rainy season.

I first came to El Obeid in January, in the dry season, so I continued to Rashad in the luxury of a Ford truck. In contrast, on numerous travels later, eight mules were to be my constant companions. For wet-season service they cannot be surpassed. We civil servants used to fall heir to animals "boarded" by the military. The average age of my caravan was 17, yet seldom did one of its members tire or fall sick.

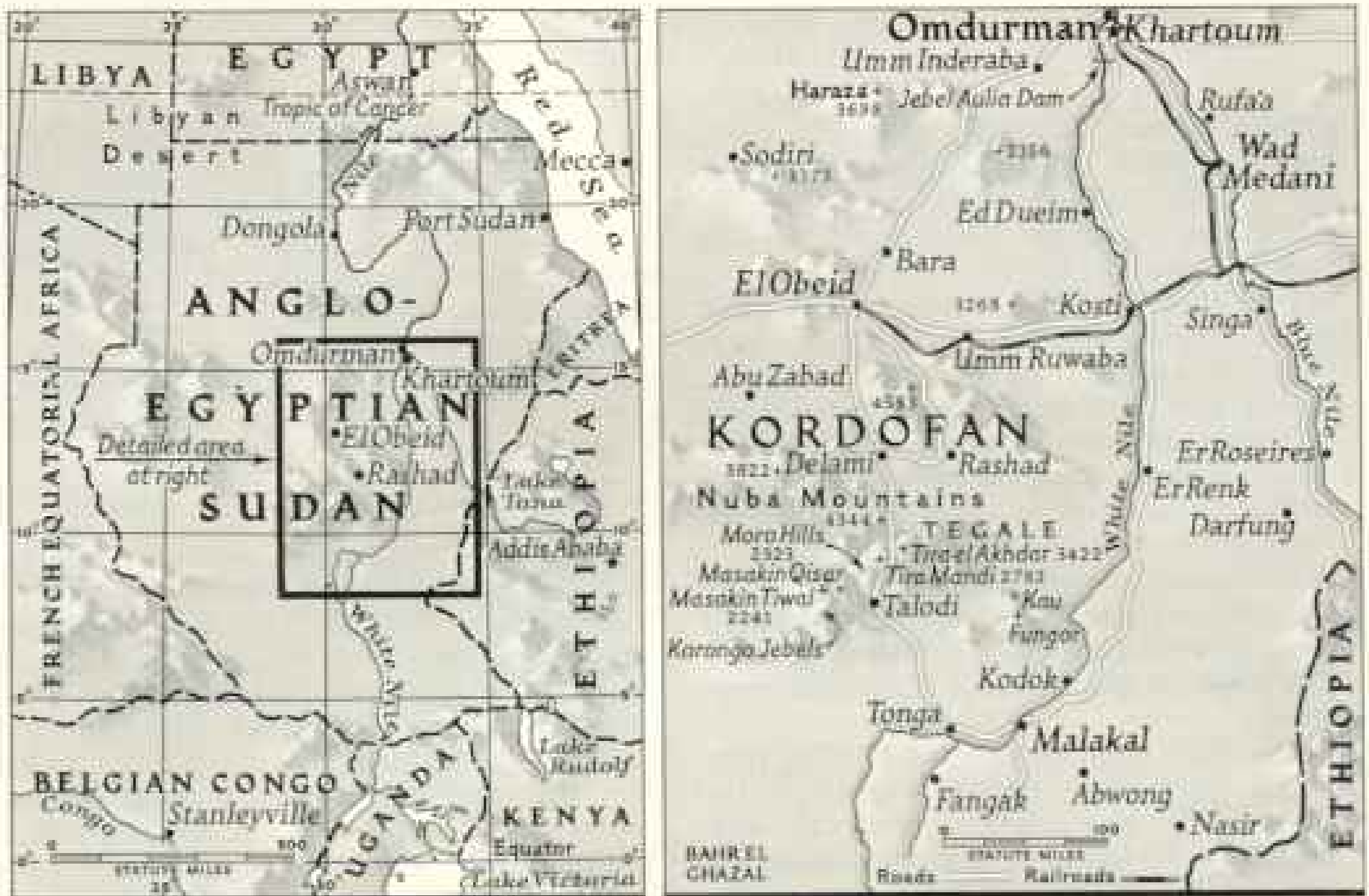
## Delami, Nuba Show Place

The first night I passed at Delami, where my District Commissioner met me. Delami was not on the direct road to Rashad, but there was a Kordofan tradition that a newcomer first set foot in the Nuba Mountains at this model village.

Though the town was a police post in Nuba country, it was ruled over by an Arab *mamur*, as our native political assistants were called. Delami was a kind of retreat, selected on the smallest excuse for conferences or to be shown off to distinguished visitors (page 270).

\* See "Along the Nile Through Egypt and the Sudan," by Frederick Simpich, NATIONAL GEOGRAPHIC MAGAZINE, October, 1922.

† See, in the NATIONAL GEOGRAPHIC MAGAZINE: "Adventures Among the 'Lost Tribes of Islam,'" by Maj. Edward Keith-Roach, January, 1924; and "Two Fighting Tribes of the Sudan," by Merian C. Cooper, October, 1929.



Drawn by Harry E. Oliver and Levin H. Alboum

### In Kordofan's Nuba Mountains 300,000 Negro Tribesmen Cling to Primitive Life

The Nuba, general name for these hill dwellers, people the broad valleys and fertile plains between the irregular ranges, massifs, and rugged rocks of their homeland. The mountains extend south and east almost to the edges of the White Nile Valley. They cover an area about the size of South Carolina. Kordofan is a Province of the Anglo-Egyptian Sudan, vast region over which Egypt now seeks complete control. Britain holds that the Sudanese themselves have the right to a voice in any decision about their future.

Here Abdulla, the mamur, conducted the affairs of the primitive Koalib tribe of Nuba with fatherly benevolence. He also had a penchant for tidiness.

The village "green," where the police paraded daily, was covered with gravel so fine it might have been strained through a sieve, and was edged with whitewashed stones. The garden of the neat mud-walled government resthouse was a mass of jasmine and magnolia.

The Koalib, a clean and tidy people, were fond of Delami, too. A citizen who had languished in jail there for a year came running into the mamur's office a week or so after his release and begged to be incarcerated again. It was so much more comfortable than his own home!

#### To Rashad with Fire and Sand

In Africa we thought highly of Ford cars, especially those reinforced for hard tropical use. My arrival in Rashad gave proof of their reliability. Plugging up the one-in-four grade on the outskirts of the little town, our overheated engine sputtered to a stand-

still and flames issued from its waterless interior. The fire extinguisher was empty.

I resigned myself to the loss of my new tropical kit. But the driver was less baffled than I. He shoveled sand on the fire and, by the will of Allah no doubt, killed the flames. Ten minutes later he pressed the starter and we entered Rashad (opposite page) as if nothing had happened.

The official who selected Rashad as district headquarters was of a more aesthetic than practical turn of mind. The site was beautiful but the town had been built on top of a high hill (page 254). Even our water had to be brought up from below. At the end of a long trek in the rains it was torture to complete that last uphill ride on exhausted animals. Perhaps the founder of Rashad had the bright idea of making the approach of the *mazlumeen* (oppressors) more difficult.

*Ana mazlum* (I am oppressed) is the opening gambit of every complainant, Arab or Nuba. Along with the magic word *waraga* (piece of paper) you learn it on your first day in action and never forget it.

Once when I was trekking in Baggara coun-



George Hodger—Magnum

**Union Flag and Star and Crescent Fly Side by Side in the Anglo-Egyptian Sudan**

The vast country, a condominium ruled jointly by Great Britain and Egypt, is about one-third as large as the United States. Here flags of both nations flutter outside the *merkaz*, or administrative building, in Rashad, capital of the Tegale district of Kordofan. Flowering shrubs are frangipani.



try a little old Arab crept into my tent late at night. He looked mournful, but to my surprise did not open discussion in the orthodox way. He merely kissed my hand and pressed into it a tight wad of papers.

I undid the string and read in English, under a date some years before, "This man has been told that his case has been thoroughly examined and that no more can be done for him." The next was less courteous, "If this pest appears again I have told him I will throw him in jail." The rest of the wad was in similar vein and a nice variety of language.

I did what I could for the little man and he retired silently into the night.

At Rashad the three bungalows occupied by the District Commissioner, the Agricultural Inspector, and myself stood in a row on the eastern outskirts of the village. They were modest three-room houses built of mud with local labor. Their thatched roofs were fortified against the rains by a zinc lining. Kitchens and latrines were at opposite ends of the garden.

#### Jaundice and Blackwater Fever

Living conditions were rough but adequate, except in case of sickness. Then the afflicted began to long for civilized comforts, as I did when smitten once with jaundice.

One morning the Agricultural Inspector noticed the yellow tinge of my eyeballs. He correctly diagnosed the ailment, but had no idea of the cure. The District Commissioner was on leave.

We composed a telegram to El Obeid and the reply came back, "Go to bed, eat oranges, and drink soda water." There were no oranges and we always took our whiskey with plain water. So I went to bed and mourned my fate. Fortunately, a week later a doctor arrived and I soon recovered.

Southeastern Kordofan was an unhealthy part of the world. It was all right in the dry season, but the rains brought a number of tropical diseases, including blackwater fever. Instructions for a white man attacked by this illness were to remain immobile, even to the extent of stopping dead in your tracks and having a tent or a hut erected over you.

About 20 days a month I was on trek. On the rare occasions when all three of us were on the station together we had the most fun.

Sunset in the Tropics is a big moment. The heat of the day falls suddenly away as darkness descends with incredible speed and the bullfrogs begin their croaking. Protected from mosquitoes with the aid of hip-length

canvas boots, we would restfully talk about life at home till the hyenas and jackals began to howl in the distance.

Dinner was always late, any time between nine and midnight. The servants never failed to produce their best in the way of a leathery chicken or tasteless goat when the host clapped his hands for service.

Sometimes there were visitors, and on these special occasions an automatic invitation went out to the other two residents.

#### Modeled Potatoes Bore Fingerprints

Once when the Governor was in Rashad and I was the host of the evening, Mahmud, my cook, who had a fancy turn of mind, excelled himself. The potatoes were proudly brought in, neatly modeled into figures of various local fauna.

The company gasped with admiration and congratulated me warmly. But, as I served the vegetables, even the subdued light of the candles was unable to hide on the culinary masterpiece the grayish fingerprints of the sculptor.

One official's wife paid a surprise visit to the cookhouse before breakfast one morning and found the cook straining the coffee through one of her husband's socks.

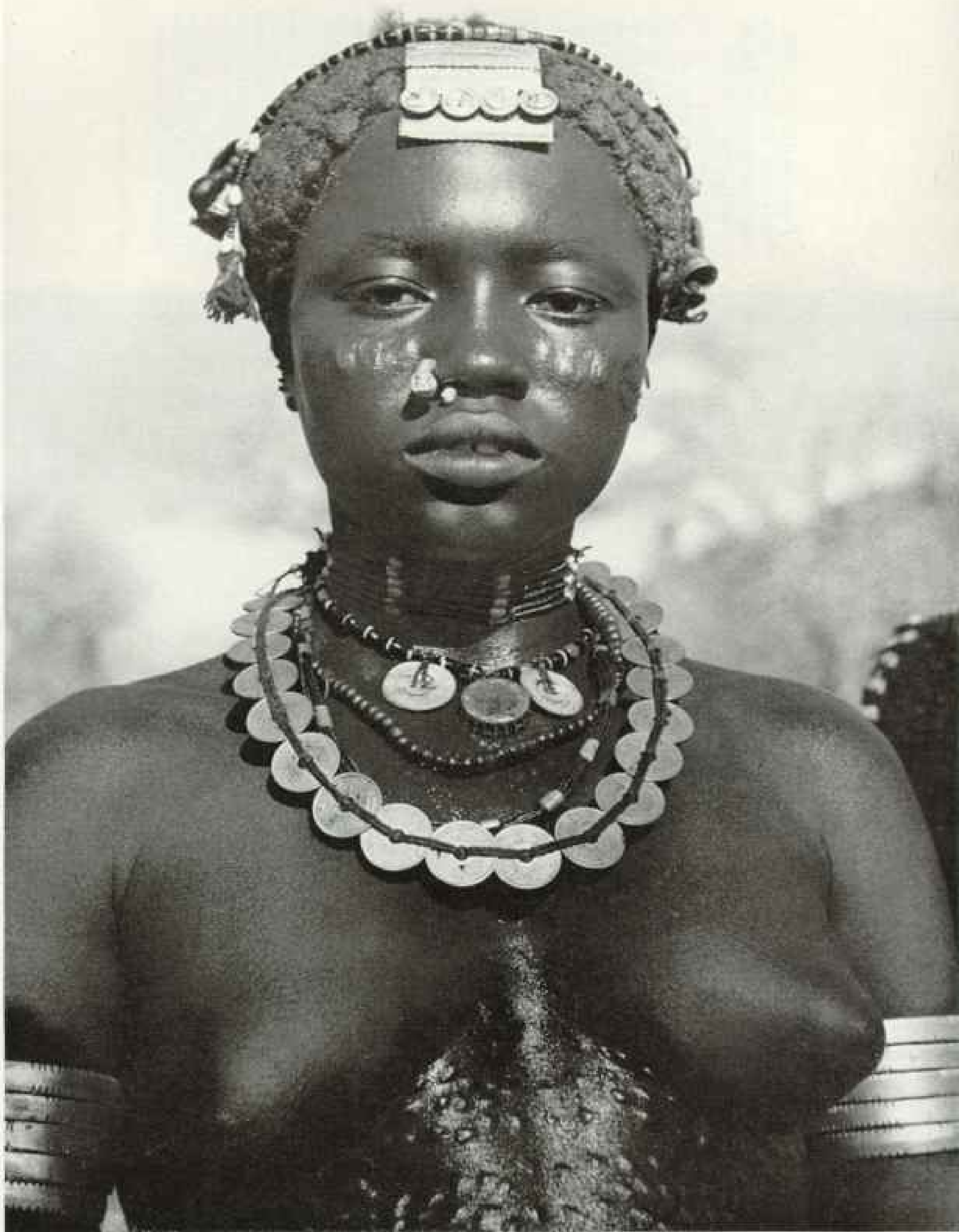
In response to her justifiable wrath the boy replied with some indignation, "But, Mem-sahib, it was not one of his honor's *clean* socks that I used."

There is a standing joke about the British changing for dinner in the wilds of Africa. We did it always in the Sudan, but there is nothing odd in the habit. Two excellent reasons exist, the first being that a daily bath of some sort is essential, the second that your servants, who are always spotlessly robed in the evening, demand a similar sartorial perfection from their masters.

On his way to India in 1921 the Duke of Windsor landed for a visit at Port Sudan. Important sheiks from all over the country came to pay homage to the son of their King. They were dressed in their robes of honor.

The Duke came ashore clad in shorts and an open shirt. I met one of these sheiks years later while on trek in the wilds of Kordofan. His first remark was to comment on the royal carelessness of many years before.

Changing for dinner, at least on trek or in a bush station, does not mean a boiled shirt. In Rashad we wore open-necked tennis shirts and gray flannel trousers waisted by a cummerbund. For important guests such as the Governor a black tie would be added. Half-way through predinner drinks he would always pull his off, indicating for us to follow suit.



**Buttons, Beads, and Soda-bottle Cap Add to a Nuba Girl's Coin Necklace**

Her home is in the Nuba Mountains of the Anglo-Egyptian Sudan. Like her primitive fellow tribesmen, she believes the self-inflicted scars on face and chest add to her beauty (pages 264 and 277). Coins are Egyptian piaster pieces.

### Towering Granite Hills Brood over Rashad's Huts and Flat-roofed Buildings in Eastern Kordofan

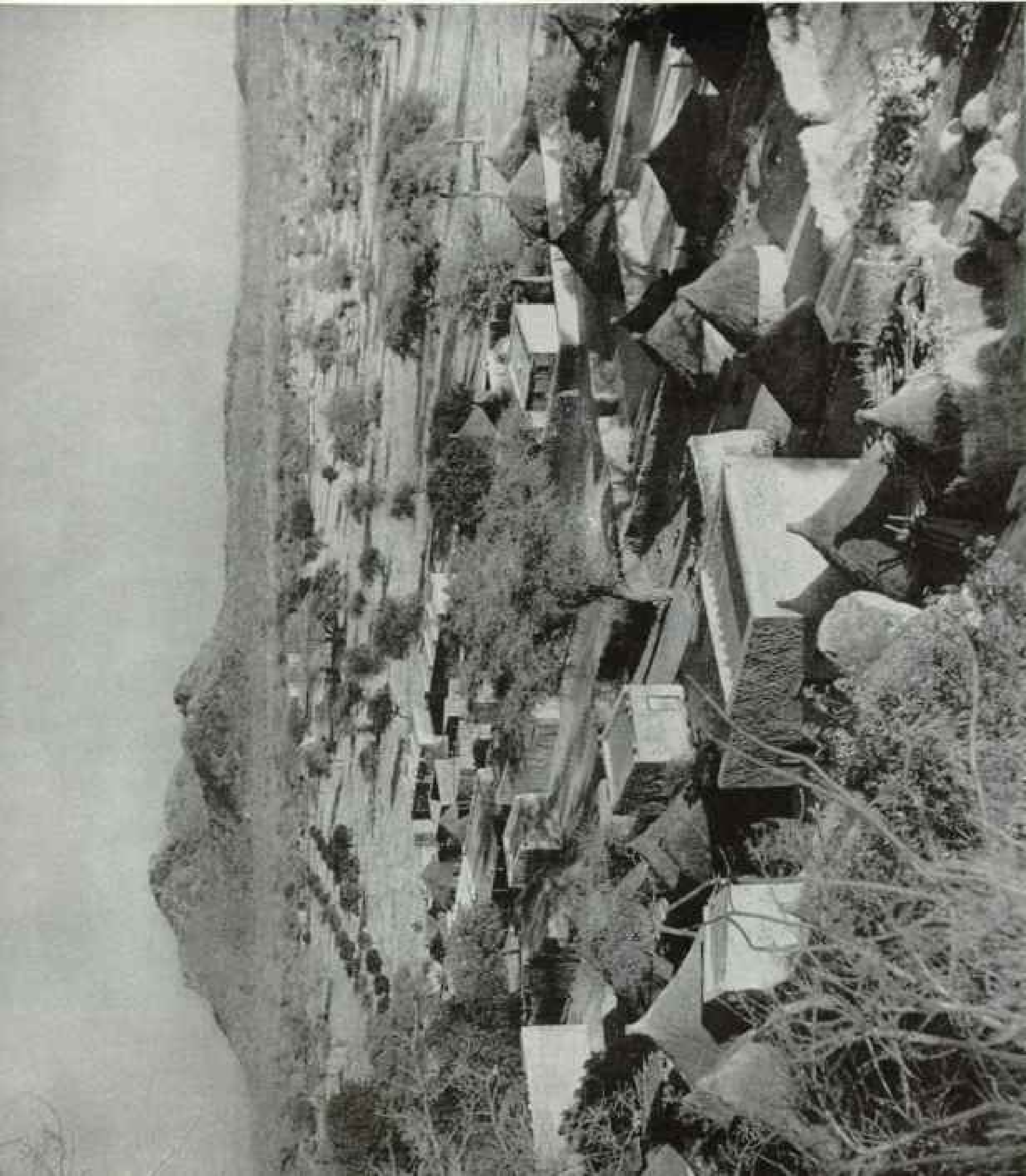
Our administrative center for the Nuba Jebels (mountains) in the Anglo-Egyptian Sudan, Rashad lies atop a high, flat hill, commanding a striking view of the countryside. All supplies for the community, including water, must be carried up to it over a steep, rocky road (page 250).

Flat-roofed houses, built of stone or burnt brick, are found only in the scattered towns. Throughout the hills the Nuba dwell in conical thatched huts, with walls of mud and wattle (page 271).

Nestling close to the foot of the Jebel in background rise the twin towers of the *marfas*, the district government office. They house British agents who supervise tribal rule (page 251).

In the hill country and intervening plains of Kordofan dwell 300,000 primitive Negro tribesmen. All are called Nuba, although they are split up into some 50 tribes of varying size. Some have more than 20,000 members, others fewer than 1,000.

Each tribe speaks its own tongue or dialect. The great variation in their speech perplexes scientists who have tried to classify their various language groups.



To the Rhythmic Clapping of Hands; Nuba Girls Stage an Informal Dance on the Outskirts of Their Village

Because she is married, the woman in center is permitted to wear a large ornate apron. Single girls must get along with small ones. The dancers belong to the Koallib tribe. Some of its members are known as a "rain clan" because they are believed to be magical rain makers.

753

Geertz Hofner—Magnum





### Jaunty Feather, Gray Heron Wings, and Monkey Fur Adorn a Korongo Warrior

Complete wing plumage of the heron (*Ardea cinerea*) is lashed to his back. The fur "plumes" are manes and tails from colobus monkeys.

Korongo tribesmen show little interest in raiding, pillaging, or other forms of warfare. Men learn to be expert handlers of spears, but this tradition extends back to the days when the tribe was forced to protect its herds against marauders. In most tribal fights, which are over women, sticks and not spears are the chosen weapons.

The Korongo stress development of strength and courage in their young men, chiefly by training them for roles in wrestling and spear-fighting tournaments. Intervillage wrestling and spear-fighting matches are peaceful affairs, climaxed by a huge feast. Until recently such celebrations sometimes had a tragic end. When visiting tribesmen were about to go home, attempts at kidnappings led to fights in which some participants were killed.



### "Headstrong" Nuba Women Solemnly Carry Wrestling Equipment into the Arena

Big wicker baskets contain colobus-monkey plumes, cane belts, gourd rattles, and water jugs. The gourds outside the baskets are filled with white wood ash which the wrestlers will smear over their bodies (page 261).

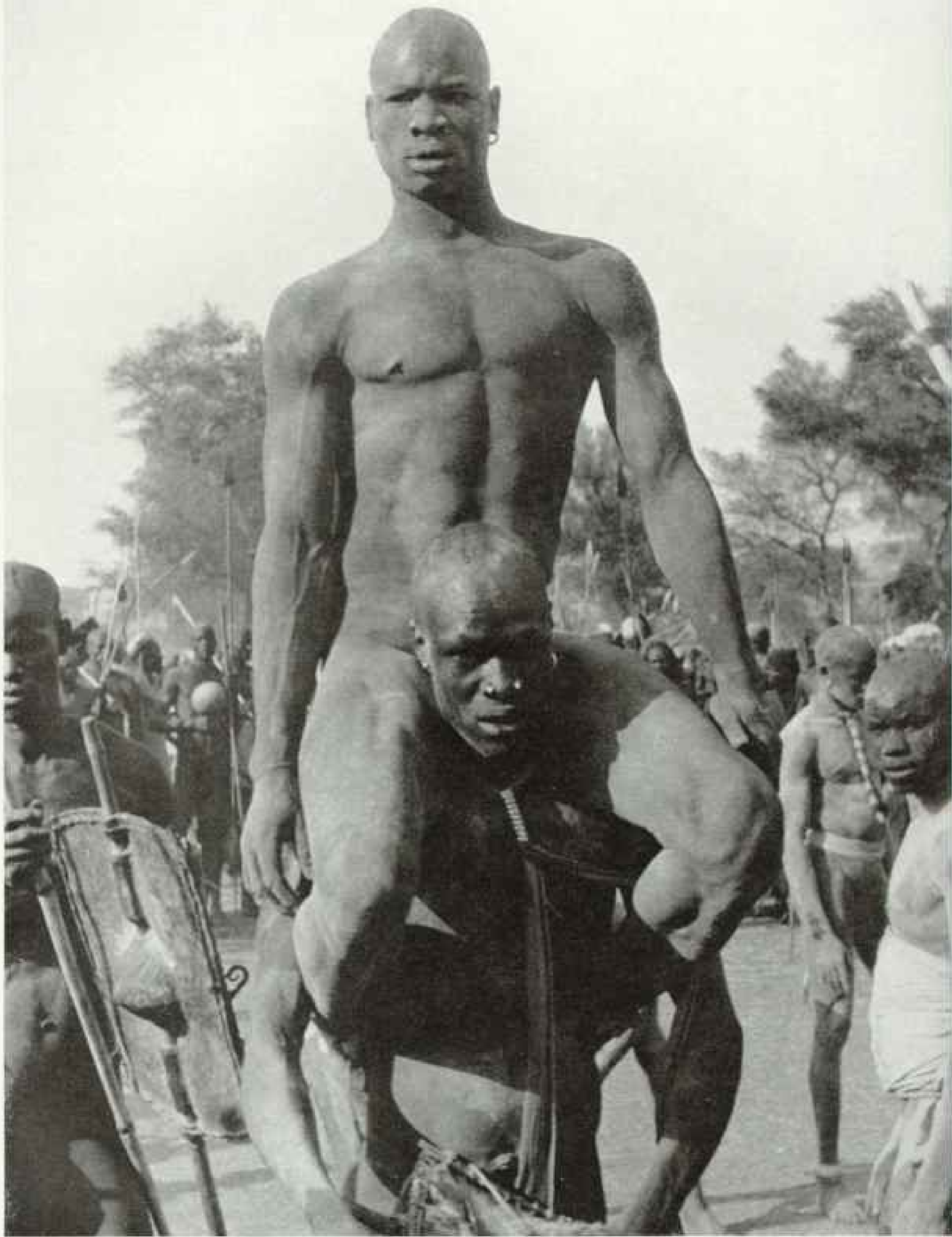
The elaborate apron or "sporrán" worn by the bearer at left is a combination of twine and baubles. All sporrans follow the same general pattern: a waistband of rope bound over with colored glass and brass rings, and a knotted string flap into which have been worked mother-of-pearl buttons, small shells, and red, blue, and black beads. A specimen the author bought as a souvenir boasted a lower fringe of brass thimbles.

Once virtually all Nuba women made their own baskets, but today most are bought from tribesmen who specialize in the business. The only skilled craft generally practiced by women is pottery making, with each tribe making a specialty of certain sizes or shapes of pots and bowls.



**Korongo Wrestlers Look Before They Leap—Their Stony Glares Are Part of the Sport.**

One good jump and the battle is on! But sometimes the temperamental combatants just keep staring. Then, for no apparent reason, they call off the bout and walk away, before either has obtained a grip.



**On a Teammate's Broad Shoulders a Victor Rides in Triumph from the Arena**

Often a young wrestler, after winning, is lashed viciously across the chest by an older man. This is believed to make the youth stronger. Almost stunned, the boy tries to show nonchalance as he walks unaided from the ring.







### Leather Belt, Cow Tails, Scarves, Garlands Bedeck Korongo-Nuba Wrestlers Warming Up for Matches

The men are generously sprinkled with white wood ash, which helps an opponent get a grip on an otherwise slippery body.

Onlookers gather near a village to watch the bouts, feature attraction of a Korongo tribe's *sibr*, or memorial celebration.

From the time a boy approaches adulthood, he is trained in wrestling, one of the chief sports of the Nuba. Early in his teens, a lad takes part in light wrestling matches. Before his first bout his father provides him with a white cloth scarf, cut into strips and tied around his neck and waist.

Elaborate ceremonies mark his promotion to more strenuous matches with wrestlers from different villages or communities. He receives a cow's tail from his father, his scarves are cut from colored cloth, he dons a goatskin belt, and he fastens goat's hair to the belt.

Older men who have been famous tribal wrestlers stage a practice bout before him to teach him the finer points of the sport. From a brother of his mother he receives a bull, to signify his "coming of age."

If a boy becomes a finished wrestler, he adds brass bells and monkey fur to his waist adornments and takes part in extremely severe contests, held chiefly during funeral festivals.

On each occasion, guests are invited to the ceremonies to indulge in feasting and beer drinking.

In other Nuba tribes, slightly different customs are observed.

George Rodger—Magnum

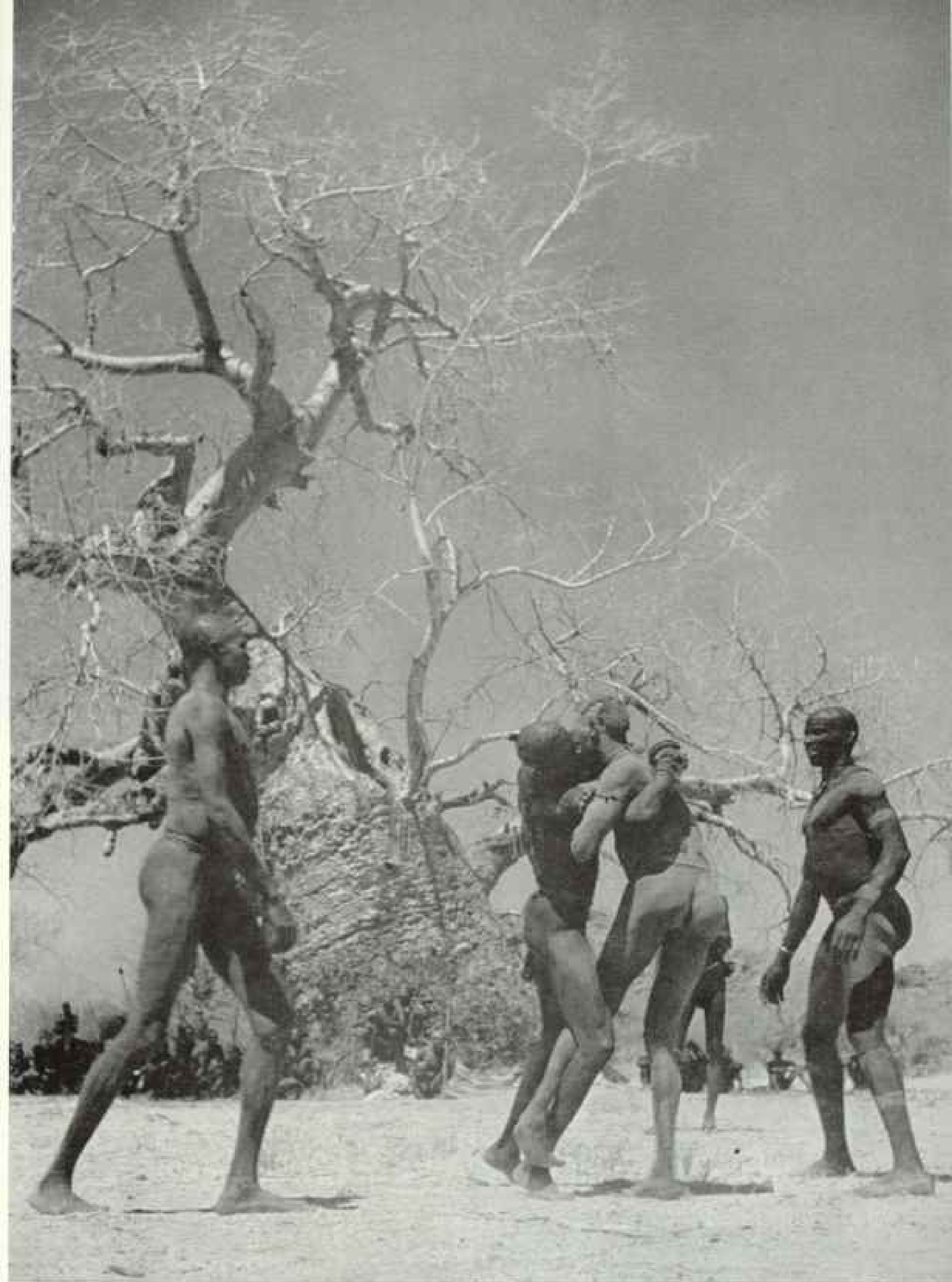


**Double-edged, Concave  
Bracelets of Brass Deal  
Bad Wounds, but Entitle  
Their Wielders to Marry**

Women and children are not permitted to watch the cruel bracelet fights staged by the primitive Kau and Fungor tribes.

The formidable weapon usually is worn on the right wrist. Rough-cut flanges are nearly two inches deep. Target is the back and top of an opponent's head.

Before a youth of the tribe can take a bride, he must qualify as a *suar*, or bracelet fighter. Once a year, after the harvest, the tribesmen hold a festival at which the new *suars* are welcomed. Then, in solemn ceremony, the *suars* approach the marriageable girls of the tribe, who have assembled in one place. Each picks his sweetheart and salutes her with an ear-piercing howl (page 270).



### Bracelet Fighters Spar for an Opening to Gash a Skull with Their Wicked Weapons

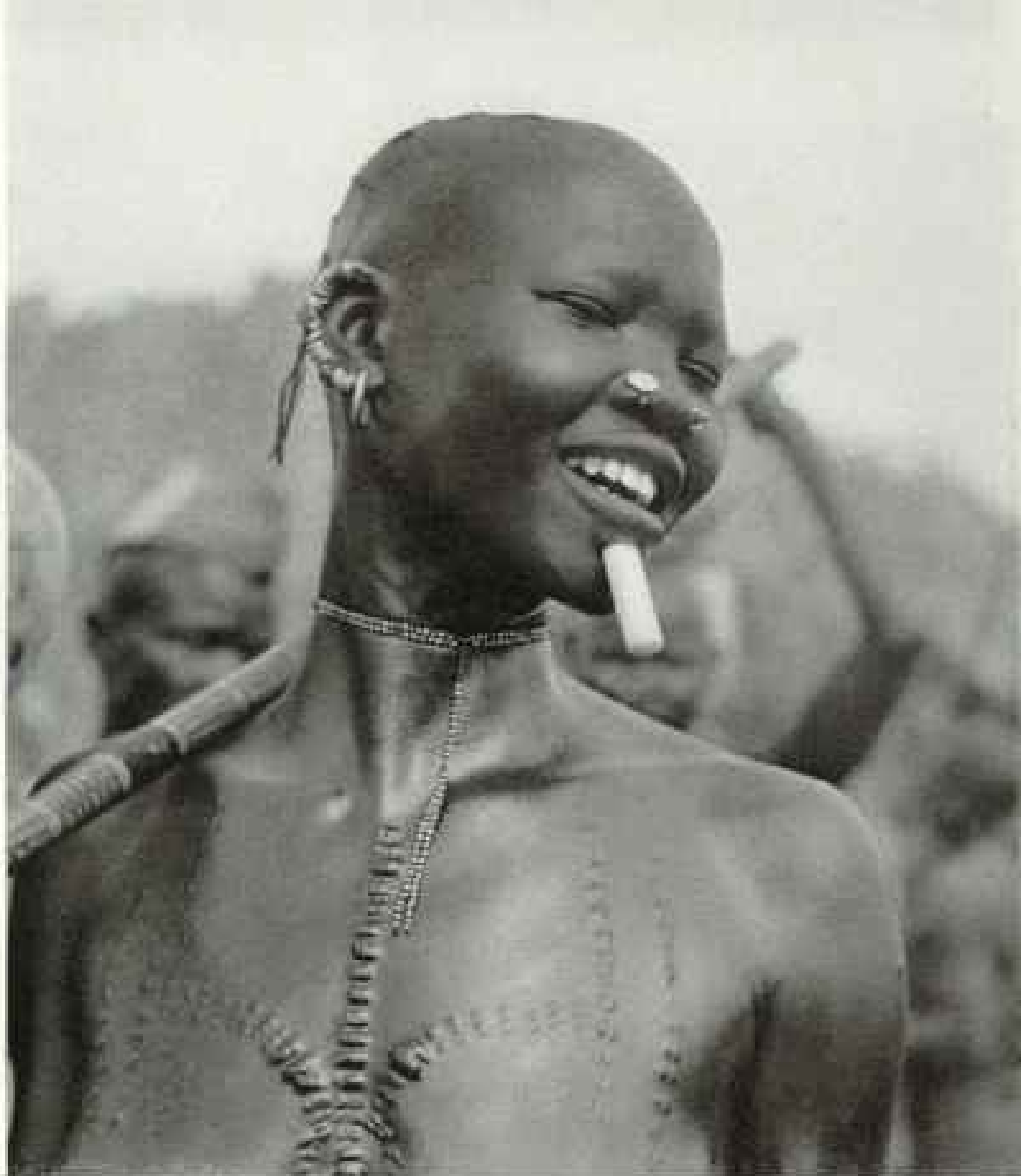
Rules of the violent encounter are strictly enforced by two referees. A round ends when a head is cut by a swift downward strike of a bracelet. Women apply oil to the deep cuts, which soon heal in the sun (page 269).

**Only on Festival Days  
Does a Nuba Girl Wear  
Her Prized Ivory Nose  
Ring and Lip Plug**

For everyday use, she inserts smaller plugs made of wood, just to keep the holes open. Her ears are studded all the way around with small rings, clipped through the flesh.

Cicatrices on her body were made in childhood by cutting the flesh and rubbing in wood ashes (page 253).

When the girl weds, her suitor must pay a bride price to her father. Since she belongs to the Korongo tribe, it probably will amount to about six goats and three spears. The bride price is much higher in most of the Nuba tribes.



**Horn of a Giant Kudu,  
Blown by a Korongo  
Musician, Produces  
Resonant Bass Notes**

Other animal horns in addition to those of the kudu, an African antelope with grayish-brown coat and vertical white stripes on its sides, are valued by Nuba music lovers. They also make primitive lyres, flutes, and gourd trumpets, together with a variety of drums.

Nuba wrestlers and stick fighters march to the scene of their matches to the accompaniment of music and the beating of drums. At the big intervillage stick fights, however, such distractions are ruled out—all attention is centered on the contests.



### Nuba Stick Fighters Wield Their Weapons Furiously until Blood Is Drawn

Intently the excited audience follows the rapid action, for this is one of the most popular tribal sports. The fighters brandish their heavy, yard-long sticks like swords or sabers. Shields, carried in their left hands, may be of giraffe or cowhide, coils of thick grass rope, or other materials. Often a fighter carries a spare stick in his left hand, to be used if his weapon breaks or is knocked to the ground.

When the fight starts the combatants strut and swagger around the ring until suddenly, without warning, they fly into combat, aiming heavy blows at their opponent's head or body. Hitting below the belt is not permitted. When blood flows, the referees stop the fight. Friends of the bleeding contestant lead him from the ring. They try to stop the flow by pressing the edges of the wound together and rubbing sand on it. Sometimes a fighter is killed by a vicious stroke.



**He Doesn't Need a Key; This Nuba Villager's Entire Door Is a Keyhole**

Lower part of the entrance is wide enough to admit a pair of legs without weakening the mud wall. The tribesman's entire household possessions comprise a few gourds, some baskets and pots, and a plank bed.

As a junior Political Officer in a bush station, I found my legal duties the most important (page 268). From the day of my arrival I held power to impose up to six months' imprisonment and, sitting on a minor court with two native magistrates, up to seven years.

This was considerable responsibility for a youngster with only the sketchiest background of legal procedure. It was remarkable how few the disasters were, a tribute to native respect for British justice and the reliability of the Sudanese police.

#### Perjury Victim Bears No Malice

Once I gave an Arab three months for theft in a clearly proved case. Long afterwards I discovered that all six witnesses for the prosecution had committed perjury. The victim bore no malice. To him it was merely evidence of the peculiar will of Allah.

The Nuba are fundamentally honest and frequently confess to their crimes. I was taken aback early one morning when a Nuba arrived at my bungalow and announced, "I killed a man yesterday and have come to give myself up to the government."

He sat quietly on my veranda till a policeman arrived. There was no particular motive in his action except perhaps a feeling that he would have a better chance if he came personally to me and explained. Fortunately the case was one of manslaughter with extenuating circumstances and a light sentence was possible.

The life of a convict in Rashad was reasonably happy and very useful. Prison gangs carried up the water from the foot of the hill, thatched our roofs, tended our gardens, kept our offices clean, and did all the other odd jobs.

There were always prisoners because of the Nuba who lived in the Tira jebels. It was an old Tira custom that a prospective suitor must steal a reasonable number of Arab cattle in order to win his lady's hand.

Neither stern sentences nor less drastic suggestions on marital qualifications had perceptible effect on this otherwise well-behaved tribe. At least twenty of them usually were serving time for cattle theft.

There were no European police officers in the Sudan outside the largest towns, and supervision of the force was another of my duties (page 275).

Both Arab and Nuba were recruited, and they worked well together, although Arabs seldom were sent into exclusively Nuba areas.

The Arabs were ruled whenever possible through their tribal heads, whereas the Nuba, except in a few cases, had not reached that

stage. They were more directly ruled by their Political Officers.

Tax collection in Arab areas was in the hands of tribal authorities. The Nuba were still in the poll-tax stage. The important thing was to see that every able-bodied male paid some personal due in acknowledgment of government suzerainty. To attempt to collect a graduated tax would have been futile.

Soon after my arrival a terrible epidemic of cerebrospinal meningitis swept Kordofan. Hundreds of Arabs and Nuba were stricken, and confidence in the government was severely tested. The only means of controlling this usually fatal disease was to enforce strict and immediate quarantine.

The Arabs were easy enough to handle. They understood prophylaxis. The Nuba behaved like badly frightened animals and huddled together around each new victim, the most dangerous thing they could do. In extreme cases we had to resort to burning their huts to get them into the open.

One day I went to a village where the epidemic was raging and the inhabitants were too frightened to listen to reason.

As I walked up the rocky pathway to a hut that was to be burnt, I had to stand aside while a litter passed bearing the body of an 8-year-old boy who a moment before had died. His knees were bent and his neck forced back in the ghastly contortions of the disease.

At that moment I think I realized more clearly than ever before what a worth-while job was ours. At least it steadied my hand to set light to the thatched roof and destroy the home of a poor savage in the interest of his future welfare.

#### Timely Laugh Saves Life

In a near-by village my District Commissioner had a strange experience. He was walking away by himself after setting fire to a disease-laden hut when he rounded the corner of a hillside ledge and came face to face with its owner. The Nuba stood there in a threatening attitude with his spear raised.

My DC, unarmed, tried to talk to the man, then realized that the savage did not know Arabic.

In his official capacity the Commissioner could hardly turn tail and run. And had he done so, it probably would have meant a spear between his shoulder blades.

The Englishman thought of the meeting of Robin Hood and Little John on the foot-bridge, with its rather obvious differences in relationship, and suddenly was struck by the absurdity of the situation. In his nervous-





H. F. Smit

### Nuba Try Lawsuits in Open-air Court, Tribal Fashion

The District Commissioner serves as judge; a policeman assures order in court. Sentences range up to six months' imprisonment. Two native magistrates sit with the Commissioner or his representative in trials for more serious offenses (page 267). But most disputes are settled in tribal courts. One excitable Nuba husband demanded that the court protect him against the winning ways of a younger man. His charge was that his wife's head had been turned by flattery.

ness he laughed out loud. Laughter is universally intelligible and also infectious. The African began to laugh, too, and the situation was saved.

So far, in the interests of simplicity, I have talked of the Nuba as if they were one nation. Actually, the name Nuba has come to be used for a group of primitive, non-Arab tribes who have lived in the Kordofan mountains at least since the recent dawn of Sudan history.

There are 10 groups of Nuba whose languages are mutually unintelligible. The inhabitants of two hills only a few miles apart sometimes cannot understand each other. Physically also they are different.

The Nuba now number about 300,000, having increased considerably in recent years. In slave-trade days some 200,000 had been removed in bondage to Egypt by 1839. Other thousands had been seized by Arabs of the surrounding plains and sold to native Arab merchants.

It was difficult not to father the Nuba and keep him, naked and unashamed, in a glass case. He called you by your surname if he knew it, and "Turk" if he didn't, for to him all white men were Turks.

Like all of Nature's children he wanted education; the problem was to maintain the right pace. In the Nuba areas the missionaries had a number of Nuba elementary schools to supplement those of the government.

Many Nuba completed their education with success and in government circles succeeded well in fair competition with Arabs. But they maintained a genuine pride in their customs and primitive origin.

I knew two who were police clerks in Khartoum. Each year they returned on leave to their jebel near Delami. On arrival they took off their European clothes and spent the holiday in their birthday suits.

### Marriage Reduced to Simplest Terms

I never knew a Nuba who was really mean. They were honest, frank, generous, and good-natured.

They had several characteristics markedly different from the Arab. For one thing they had few inhibitions about domestic bliss. Marriage was very simple. The partners indicated their admiration for each other, lived together, and stopped living together when tired of it. But they were not promiscuous

and there was much respect and affection shown. Small dowries were exchanged.

One night I was playing martial music on my phonograph to an appreciative Nuba audience. They especially loved Sousa's marches, and under their influence the older men would huddle together with fire in their eyes and recount the tales of past wars.

That evening I had a box of crackers and gave one to an attractive girl who smilingly thanked me. Then she broke it in half and quite unabashed crossed the crowded floor of the resthouse and handed a piece to her boy friend. That kind of incident sticks in your mind when you are working among Arabs at the same time, and have to remember that even to ask after an Arab's wife or his children is very bad manners.

The Nuba are great athletes. Each group of jebels had its own peculiar sports. The people of the Korongo Jebels are a race of giants averaging over six feet. They wrestle with great energy and skill (pages 257-261). In the Moro and Masakin hills stick fighting, closely resembling saber fighting, is the sport. In their left hands contestants hold a small round shield covered with hide (page 265).

But the prize Nuba sport is the amazing bracelet fighting of the Kau and Fungor jebels. The inhabitants are exceptionally primitive and are isolated from the rest of the Nuba by a large stretch of purely Baggara Arab country.

Their administration was unique, since they came under Arab rule, that of Radi Kimbal of the Awlad Hemeid tribe. He was the finest Arab I met in the Sudan and the Nuba almost worshiped him for his fatherly kindness.

#### "Friendly" Fights with Brass Bracelets

I was frequently on trek into the Awlad Hemeid country and never missed an opportunity to visit the Kau and Fungor Nuba who were ready at the least excuse to organize a series of bracelet fights.

The contests were considered too tough and bloody for women to watch.

The weapon is a double-edged circle of concave brass, usually worn on the right wrist (page 262). The target is the top and back of the head.

Rules are strict and there are always two referees in close attendance. The opening moves are made with sticks like quarterstaves, which are held in both hands. After some feinting and parrying, which is merely a warming-up process, the sticks are cast aside and the real battle begins.

Magnificently poised, with the braceleted arms slightly crooked above their heads, the

contestants wait for the opportunity to clinch and strike a wicked downward blow (page 263). Then the fighters are separated by the referees and the round is over.

I saw many fights and often ugly wounds, but never a man knocked out, nor ever a loss of temper or a piece of dirty play. I was told that anyone who fouled was suspended for the rest of the year and lost caste with the tribe.

The healing powers of the tropical sun are amazing, though the women do apply oil to the gashes caused by the sharp-edged bracelets. I have seen a deep four-inch cut in a man's head one afternoon, and, on the next morning, have found the skin closed and the wound practically healed.

#### Only Bracelet Fighters May Wed

The most important athletic occasion in the life of the Kau and Fungor Nuba is the marathon race during the annual *Sibr el Ma'rad*, the festival of fertility that takes place when the harvest is in.

A sibr (festival) is always an excuse for beer drinking, which the Nuba love. Their celebrations are much more frequent and informal than allowed by the Prophet Mohammed to his Moslems.

No youth may marry until he qualifies as a bracelet fighter (*suar*) and this feast is mainly one of welcome by the elders to those who have just qualified as *suar*.

On the day following the feast a mating ceremony takes place.

First the virgins emerge from the village, their naked bodies smeared with groundnut oil and painted with scarlet and yellow dye. Chattering excitedly, they huddle against the huge trunk of a *tebeldi* (baobab), the largest tree in the Sudan, in the hollow trunk of which water is stored to keep cool.

Then the young bachelors arrive in small groups with their birthday suits smartened in two ways. The yet unqualified are smeared with white ash, spotted and striped with black. On this occasion they are mere spectators, but the bolder ones strut around in the hope of catching a lady's eye for future years.

Those who will be up for selection next year blacken their chocolate bodies with charcoal. These black knights trot majestically towards the virgins, carrying long staves in one hand and a curved knife in the other.

Periodically they halt, bend back their torsos, put their right hands over their mouths, and roar like some supernatural beast. I think it is the most magnificent human gesture I have ever seen. It is certainly the most frightening yell I have ever heard.



### Abdulla, Tidy *Mamur* of Delami, Keeps His Nuba Mountain Show Place Spotless

Visiting officials stop at the commodious government resthouse (center). Administrative buildings nestle at the foot of the hill beyond. Rocky, spiny outcroppings in background are common throughout Kordofan. Delami, a police post, is so clean that once a Nuba tribesman, freed from its jail, asked to be imprisoned again because he was more comfortable there than at home (pages 249-250).

Finally the newly initiated *suar* appear. They are rather dignified and carry rifles. No paint is needed to magnify their superb bodies. They go at once to the ladies, firing their rifles in the air.

The virgins skittishly cover their ears and turn their backs. Then each *suar* picks his sweetheart and, standing before her, rends the sky with the local howl. The times I watched the ceremony I did not notice either party overstep even the most mid-Victorian mark.

On the third and final day the marathon race is run. This contest is only for the bachelors who have not yet attained the rank of *suar*. There are two heats, one for the youngsters and the other for those whose names next year may be placed before the

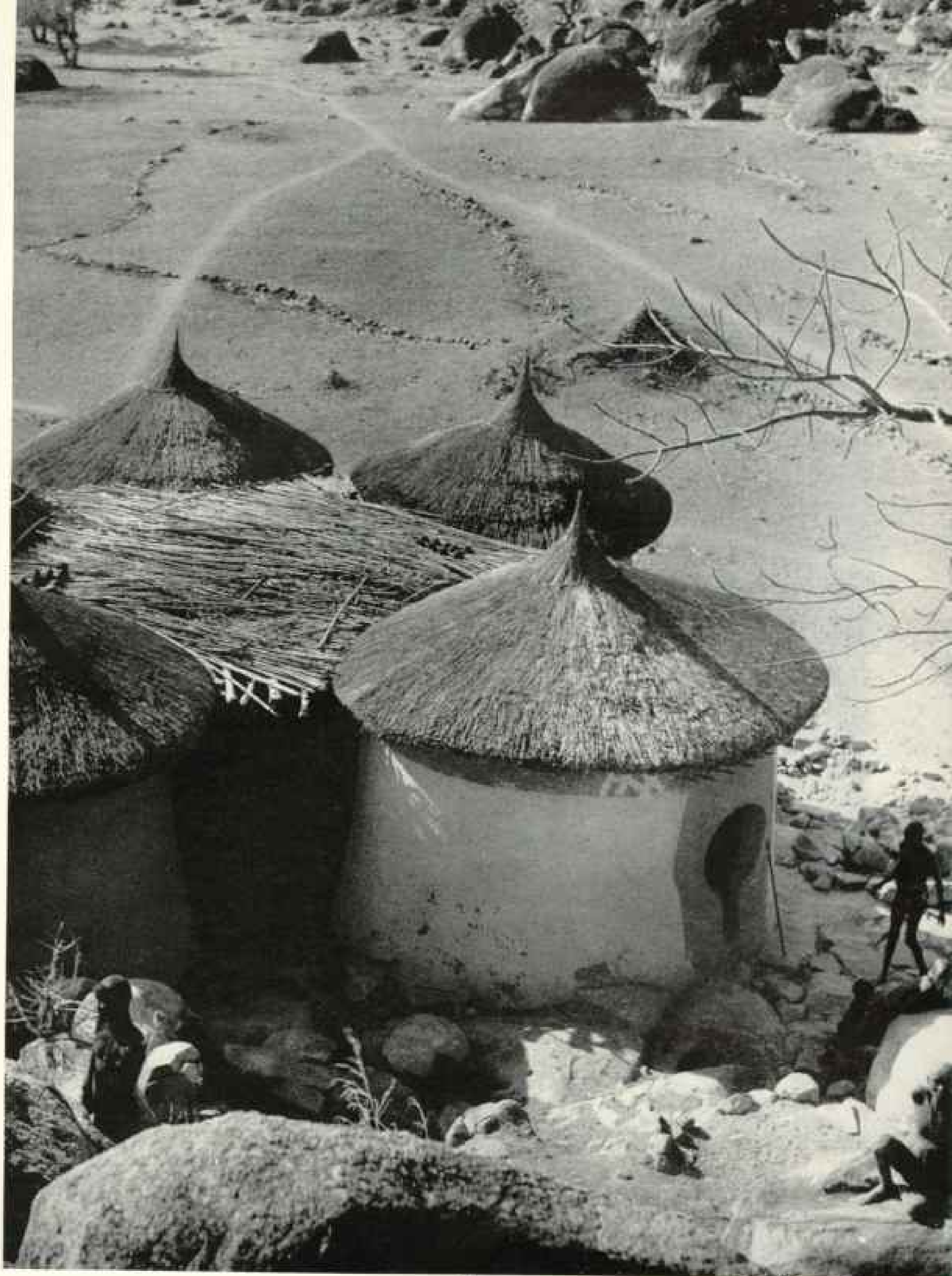
selection board. To the latter the race is very important, since their success has much bearing on next year's selection as *suar*.

The women dominate this third phase of the festival. The umpires, grouped together on the flat rock that is the winning post, are four of the oldest and most respected ladies in the community.

As the runners toil up the finishing stretch of their gruelling 10-mile course, sweethearts and relatives run with them, shouting encouragement.

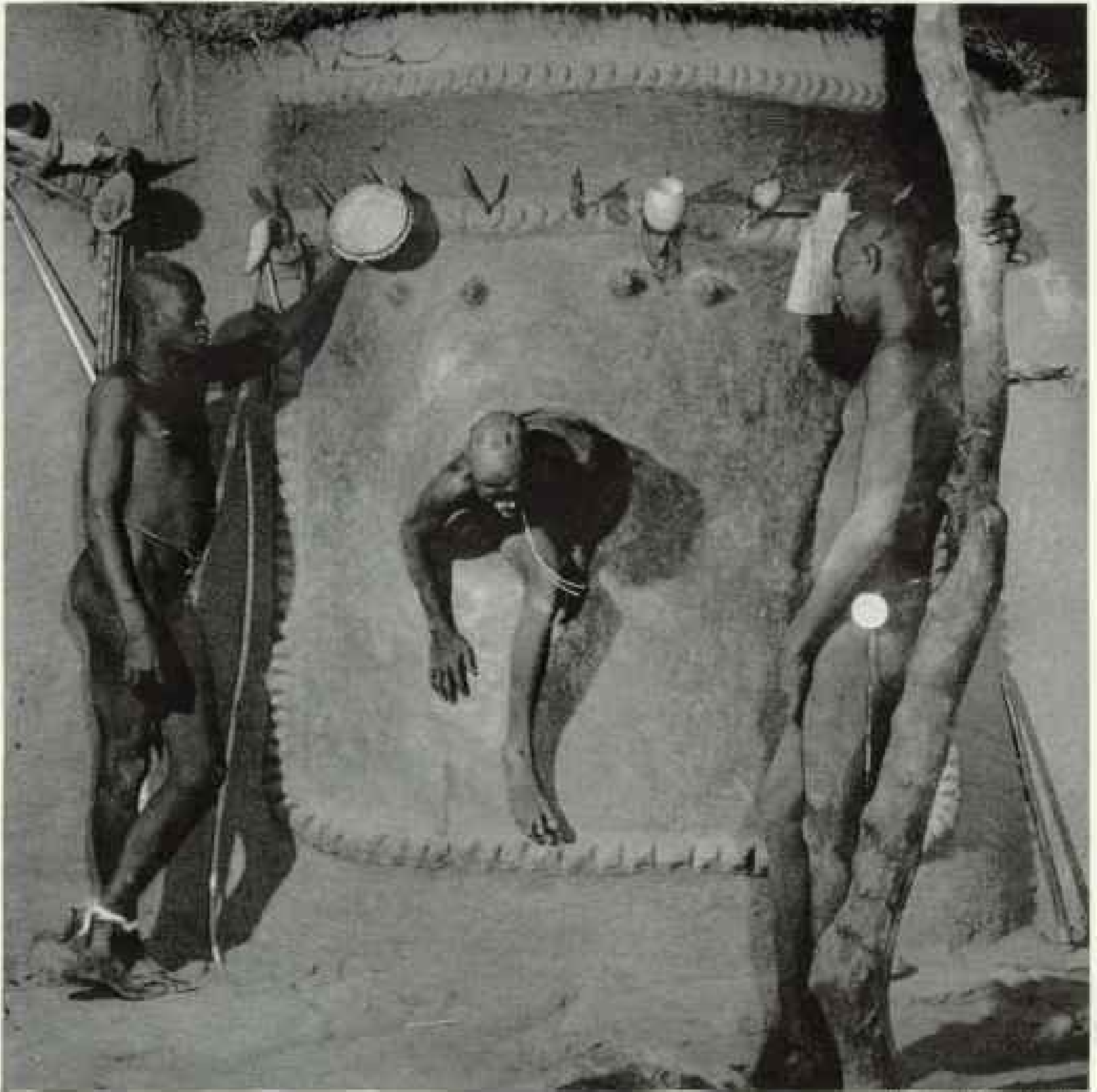
After it is all over, the weary contestants retire to the village, supported on each side by women, with others following and occasionally fanning the runners' heated brows with large leaves.

The Nuba are ruled by chiefs (*maka*), but



### Five Mud *Tukuls* and a Covered Courtyard Are Home to a Nuba

Only entrance is the keyhole-shaped doorway (page 266) to the tukul at right, which is a reception hall. Adjoining, on left, is a bedroom; next, only partially shown, a beer storage room; then a granary; and finally a cookhouse. Thatched roofs are weatherproof; roughly laid durra stalks protect the courtyard from the sun.



George Hodge—Magnum

### Wriggling Like a Fish, a Nuba Emerges from His Bedroom "Door"

It's a hole in the wall, about 4 feet high, but it keeps sleeping quarters warmer in winter and drier in the rainy season. The door opens on the central courtyard of a Masakin Qisar house in the Nuba Mountains (page 271). The ornamental disk on the hip of man at right is the top of a cigarette container.

the most important influence over the tribe is held by the *kujur*, or holy man. His main job is rain making. The position carries with it much responsibility, and lack of success can result in the direst punishment.

#### Unsuccessful Rain Maker Buried Alive

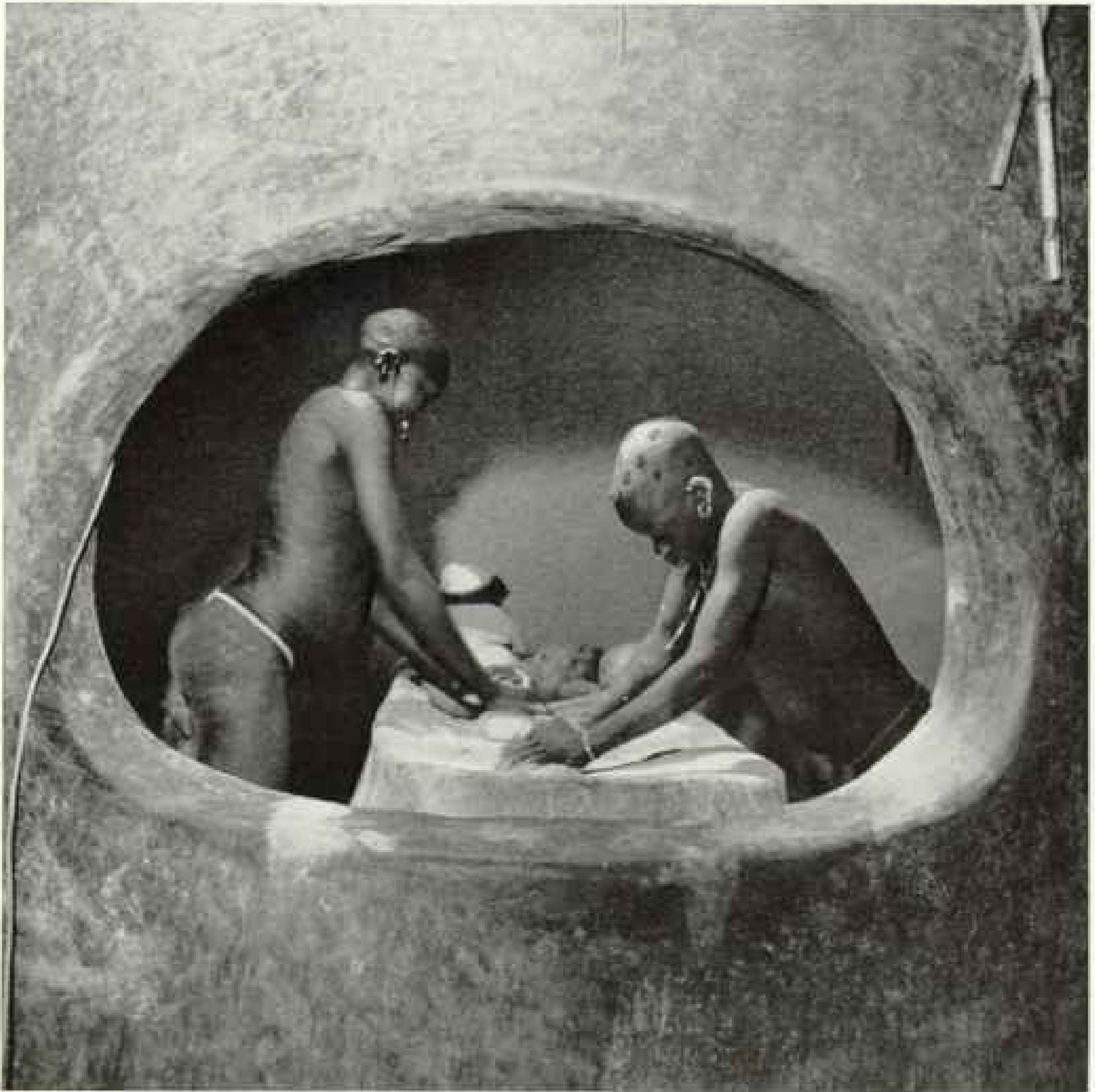
In one group of hills the government had to face a difficult problem in human sacrifice. In time of drought the *kujur* used to be led out of the village to a newly dug grave. With sincere apology he was asked to step into it. Having done so, he was asked if he was comfortable. If not, another grave was dug.

The *kujur* having been nicely settled in his

last resting place, the people filled in the grave and trampled the new earth until the rain maker who had failed at his job was dead. Rain was believed to fall immediately after the ceremony.

The Baggara of southern Kordofan were a fascinating people with a rich historical background. These are the cattle-owning tribes, whose name is from the Arabic word for cow. They spent the cool weather with their cattle on the plains of Tegale and were politically enmeshed with their neighbors in the hills.

Our main administrative task was to foster co-operation between the two, but check any domination by the more civilized Arab.



George Hodger—Magnum

#### Years of Rubbing Wore the Hollow in This Slab of Black Rock

Here Nuba women grind a hard, smooth stone over grain as it rests on the block. In some sections of the Nuba Mountains tribes store their grain for three years. In other areas with more rainfall, it spoils after one season. The window through which the picture was made is the only exit from this family granary.

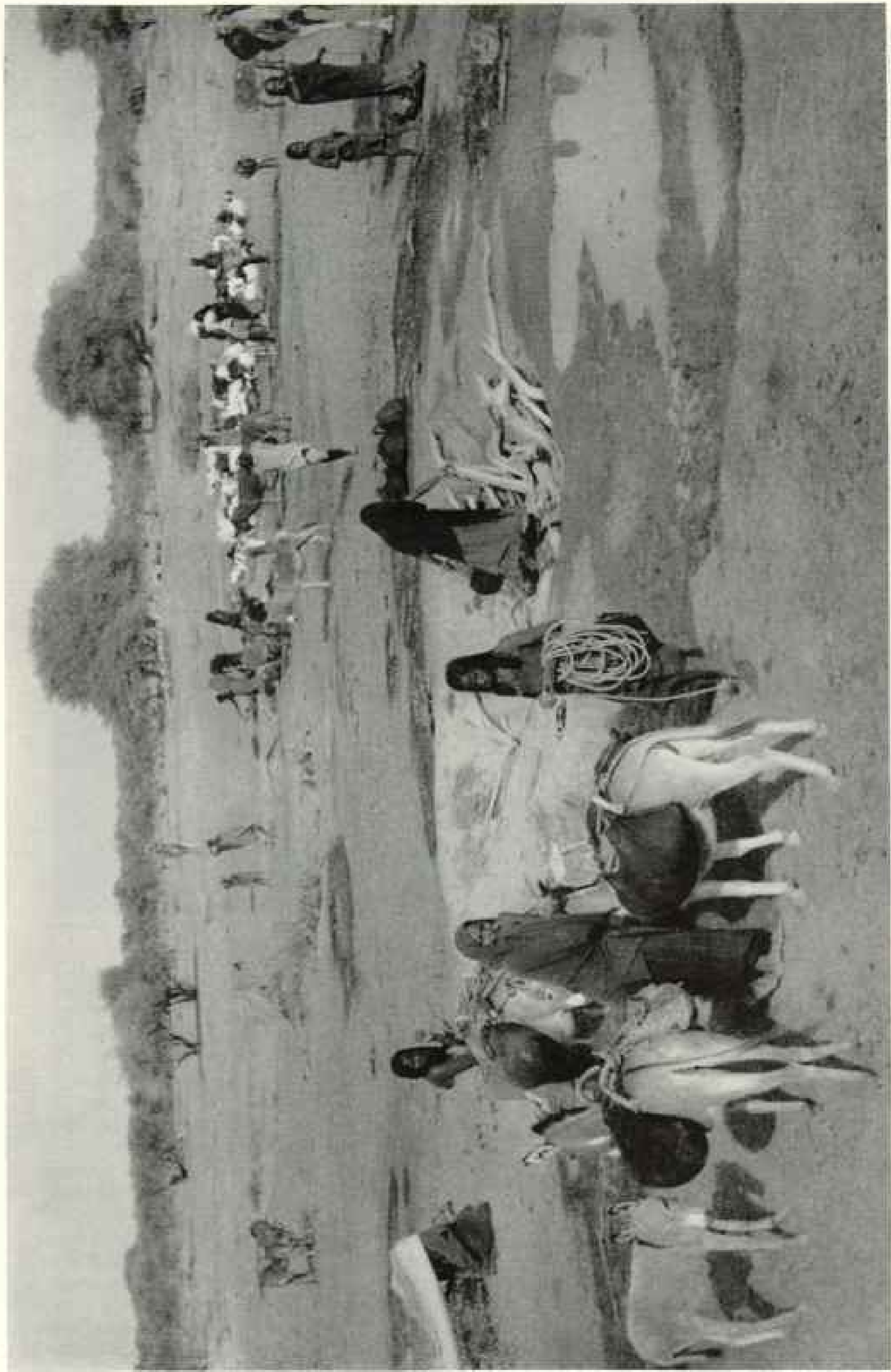
It was not always easy. One day my Nuba kitchen boy Karra came to me and gave notice. He was too proud to tell me why, but I eventually learned it was because Mahmud, my Dongola cook, had slashed his ribs with a knife.

Mahmud had found Karra eating a pork chop and had become angry when the 14-year-old lad refused to give up the staple diet of the Nuba in deference to the tenets of Islam. Mahmud was fired and Karra eventually became my highly efficient butler.

The life of the Baggara tribesmen was easy enough to incline them to laziness. They were also great procrastinators.

Their dilatory habits were especially irritating because innate shrewdness often lay behind them. We encouraged the digging of wells by promising to supply zinc linings. Often the Baggara didn't bother, for they knew that if a well was really necessary, government labor would eventually do the digging.

One year there was a particularly virulent epidemic of rinderpest among the Baggara cattle and many of the owners were maddeningly conservative in their views on injection with serum. Once they had sampled its benefits, they could be just as maddeningly persistent about obtaining it.



Precious Water Draws Man and Animal to an Oasis in Northern Kordofan's Desert Wastes

Here at Umm Indraba wandering Kabbabish Arabs water their flock of goats and beasts of burden. Goatskin water bags carried by donkeys in foreground, and by the camel at right, are filled to capacity. This oasis, one of many dotting the eastern fringe of the Libyan Desert, lies 40 miles west of the White Nile dam.

George Rodger—Armagas



273

**Long Hours on the Target Range Make Nuba Police Crack Shots**

Here they train under the watchful eyes of the District Commissioner of Rashad. European policemen are on duty only in the largest cities of the Sudan. Elsewhere Arabs are recruited to patrol Arabian sections; the Nuba preserve law and order among the Negroid tribes (page 267).



One man arrived in Rashad with a demand for more serum at a time when our supply was temporarily exhausted. He sat down on the veranda of my house and said, "Your honor, there is no point now in returning to my sick cattle. They are my livelihood. If they die, I die, and I would prefer to end my days on your doorstep."

He remained my unwanted guest for three days and got some of the new consignment which arrived on the fourth.

The Baggara show little interest in scientific stock raising. With the development of rain-grown cotton in the area there is a definite trend away from the nomad life with their herds to an easier prosperity as sedentary cotton growers.

Each year when the heat of the Kordofan summer begins to dry up the wells, they head southward to the open water of Bahr el Ghazal Province. In the rains they move back to sell their fattened stock and their clarified butter in the larger towns.

Their *feriqs* (encampments) are easy to move, for their huts are built entirely of plaited grass, unlike those of the Nuba which always have mud walls (page 271).

#### Warlike Tribes Ruled by Wise Sheik

I learned most of what I know of the Baggara from Sheik Radi Kimbal of the Awlad Hemeid tribe, ruler of the Kau and Fungor Nuba.

Radi combined wisdom with personal charm. It was always a pleasure to visit his *feriq*, for he had perfect control of his tribe and their problems seldom reached our ears.

Not that the Awlad Hemeid were easy to handle. They were warlike and excitable, with a wide reputation for intrigue. In the days of the Mahdi they had been fanatical adherents of Mohammed Ahmed.

Whenever Radi received news of my approach there was a stir in his *feriq*. Spacious grass huts had to be built for my comfort, and Radi himself at the head of a little group of bearded, white-robed elders was always at the roadside to welcome me personally. His dignified radiance was reflected in the manners of the rest of the tribe.

The Baggara, even for Arabs, are effusively polite and the extent of the necessary hand kissing and heart touching was almost painful, particularly if you had just left a back-slapping Nuba village.

After I had freshened up from my journey, Radi would call on me, followed by servants with cups of sweet tea and coffee, and sometimes a bowl of foaming fresh milk.

Then a protesting sheep would be edged inconspicuously past the doorway on its way to sacrifice in my honor, and gradually the senior members of the tribe would drift quietly in and squat cross-legged, tweaking their long whiskers and fingering their rosaries.

Soon the hut would be filled in eager anticipation of a *meqlis* (meeting), a term that covers all Arab discussion from drawing-room chit-chat to vehement argument.

Radi would generally quell any effort to bring up thorny problems. He preferred to discuss them privately first and get approval for his own solution.

#### Saved by an Arab's Knife

While visiting another Baggara tribe, my District Commissioner became involved in a discussion during which tempers became extremely frayed. In a firm manner he was doing his best to keep matters under control.

Suddenly a man sitting directly opposite, whose voice had been raised in heated argument, stood up and, drawing his knife, advanced slowly towards the Englishman. His eyes had a glassy stare.

A hush fell on the excited group, but no one moved to restrain him. The DC remained rooted to his chair, paralyzed with fright.

His fear saved his life. The knife flashed within an inch of his right ear. The head of a snake that had wormed its way through the grass wall behind him fell with a gentle plop at his feet.

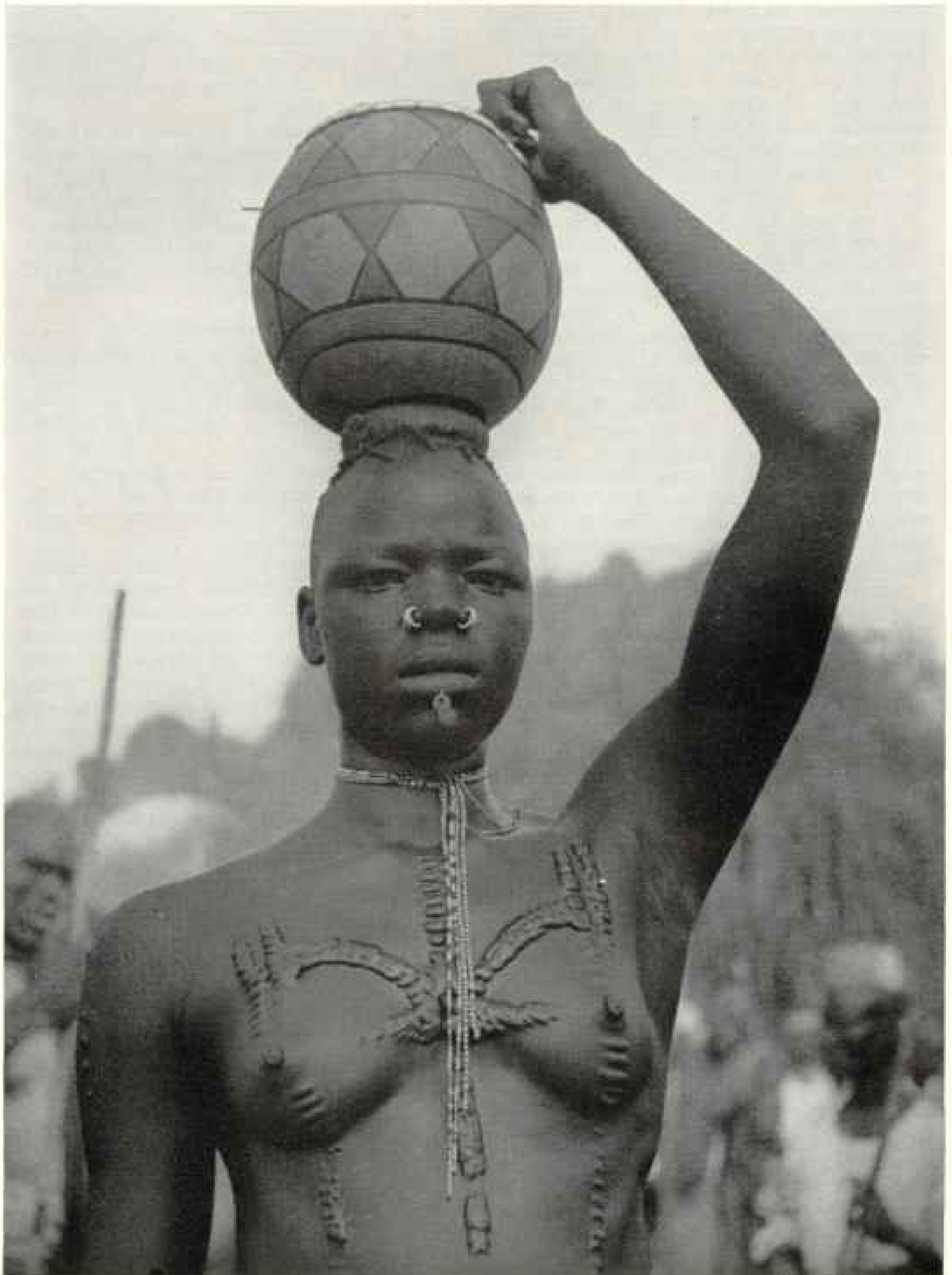
The Sudan abounded in snakes, but fortunately the natives always spotted them ahead of me and I was seldom alone in the bush.

The British Medical Officer in the Nuba Mountains was reputed to be able to pick deadly snakes up by the tail and crack them like a whip to death. I never saw him do it, but he certainly captured many with his long walking stick, forked at the handle, and encouraged his native aides to do likewise.

Once the Governor was on a tour of inspection in our district and visited the hospital at Talodi. Two days before, a Nuba attendant reported, he had captured a royal python, a nonpoisonous reptile sacred to the Nuba. He had been feeding it on milk and making quite a fuss over it.

As the Governor was about to enter one of the wards, he leaped back in alarm at seeing the "python" curled up asleep on the threshold. The attendant, with much apology, picked it up and returned it to the jar where it lived.

Later, when the Medical Officer had time to



George Rodger—Magnum

**She's Proud of the Cicatrix Designs Carved on Her Bosom**

First the skin was cut in a pattern, then wood ashes were rubbed into the wounds. The cicatrix, or fibrous tissue, contracts during healing to form a permanent scar, regarded by the Nubas as a thing of beauty. Both men and women thus adorn themselves, although the operation is extremely painful.

study closely his latest prize, he found that it really was a deadly puff adder. In the future the MO had to do his collecting himself.

Radi and I used to sit sometimes in the moonlight, when he would tell me of the intertribal wars of the Baggara. His favorite was the great defeat of the Habbania.

The men of the Awlad Hemeid hid in the long grass. Dressing their women as men, they mounted them on bulls to await a much superior force.

When the Habbania approached, the women made off as if in panic, with the enemy following in loose formation. As they passed the ambush, the male warriors of the Awlad Hemeid rose from their hiding place and slaughtered 700 of their opponents.

Sometimes between stories Radi would pause and look across at the shadowy outline of the cattle grazing all round us. Then he would gently name the great dun-colored bull that led his herd. At the call the huge beast would raise his wide-horned head and lumber slowly across to nuzzle affectionately in his master's shoulder.

According to Radi this bull had human intelligence and could be safely relied on during the great trek southward to round up any heifers or bullocks that strayed from the rest of the herd.

#### First Rule: Never Lose Your Temper

But even with the Awlad Hemeid we had our troubles. Once an affray took place in which three people on either side were killed. The hot-headed Baggara had too many such affrays and the government tried to take a firm line about them.

I had the job of investigating this case on the spot and arresting the ringleaders. I was confident of doing well because Radi was meeting me at the scene of the battle.

As soon as we had finished preliminary discussion I realized that he, the paragon of our administration, was anxious to shelve the whole affair. After all, three people had died on either side and what could be a fairer punishment from the Arab point of view?

I explained that the government did not accept the "eye for an eye" theory, but his mind was obviously made up. If any ringleaders were to be arrested it would obviously be without his necessary co-operation.

I was young and ignorant of Arabs then. I lost my temper and threatened him with a fine on the whole tribe if no immediate result was forthcoming.

Radi looked at me a little sadly and left my hut without a word. Ten minutes later he was back with servants carrying trays of tea

and sweetmeats. "Your honor," he said, "it is a very hot day and your trek has been long. Drink this and rest awhile. We will talk again later." My feelings as a "great white chief" were a trifle hurt.

After three days I reported to my DC that according to all possible investigation the ringleaders had been conveniently killed in the affray. So Radi had assured me anyway, and after all I did have the satisfaction of learning, the hard way, the most important lesson for an administrator among Arabs: Never lose your temper.

#### Evil Eye Feared in Sudan

The other occasions on which British and Arab ideas generally clash are witchcraft cases.

Most Arabs born with a walleye or a squint are supposed to have magical powers that are harmful. The "father of the evil eye" was much feared and respected in the Sudan.

Our most irritating wizard was the Fiki Ahmed, who put his magical powers to practical use by gunrunning.

Periodically he was caught and imprisoned, but he had great influence even beyond his own tribe. Once he was rash enough to cast his notorious eye on the District Commissioner and everyone expected the latter to die within a week. When he didn't, Ahmed's prestige waned considerably, but later he managed to get more than his own back.

There was a serious drought in the district and the Fiki turned up to ask if the government wanted him to bring rain. The DC, who was really rather fond of the bad old man, assured him that if he succeeded within three days a special tax would be raised for his benefit.

Ahmed retired to a hut and fasted. On the morning of the third day rain fell in bucketfuls and the embarrassed official had to pay up handsomely.

I doubt if many outsiders realize the sweat and tears of colonial administration. If this article does nothing else I should like it to praise the government servant in Africa.

I have the right to pay tribute to him. I was one myself and fell by the wayside, not invalidated out as many are, but resigning after two and a half years because life and prospects were too tough. When I remember my colleagues and their wives I must always feel a little ashamed of my own shortcomings.

Their pay was small, their rewards limited, and the chance of retirement with their health permanently impaired was pretty good. Yet, knowing the facts, they were happy to choose as their career the raising of all standards of life for the African.

# NATIONAL GEOGRAPHIC SOCIETY

GEOGRAPHIC ADMINISTRATION BUILDING

SIXTEENTH AND M STREETS NORTHWEST, WASHINGTON 5, D. C.

GILBERT GROSVENOR, President

ROBERT V. FLEMING, Treasurer

HERBERT A. POOLE, Assistant Treasurer

HILLEARY F. HOSKINSON, Assistant Treasurer

LYMAN J. BRIGGS, Chairman, Research Committee

ALEXANDER WETMORE, Vice-Chairman, Research Committee

JOHN OLIVER LA GORCE, Vice-President

THOMAS W. McKNEW, Secretary

VERNON H. BREWSTER, Assistant Secretary

MELVIN M. PAYNE, Assistant Secretary

KURTZ M. HANSON, Assistant Secretary

## EXECUTIVE STAFF OF THE NATIONAL GEOGRAPHIC MAGAZINE

**GILBERT GROSVENOR, EDITOR**

**JOHN OLIVER LA GORCE, Associate Editor**

J. R. HILDEBRAND  
Assistant Editor

LEO A. BORAH  
Assistant Editor

JAMES M. DARLEY  
Chief Cartographer

NEWMAN BUMSTEAD  
Research Cartographer

CHARLES E. RIDDIFORD  
Cartographic Staff

WELLMAN CHAMBERLIN  
Cartographic Staff

GEORGE CROSSETTE  
Research Assistant

RAYMOND W. WELCH  
Director of Advertising

GILBERT G. LA GORCE  
Assistant Director of Advertising

MELVILLE BELL GROSVENOR  
Assistant Editor

FREDERICK G. VOSBURGH  
Assistant Editor

LEONARD C. ROY  
Chief of School Service

WILLIAM H. NICHOLAS  
Editorial Staff

F. BARROWS COLTON  
Editorial Staff

ANDREW H. BROWN  
Editorial Staff

INEZ B. RYAN  
Research Assistant

MARGARET G. BLEDSOE  
Research Assistant

ESTHER ANN MANION  
Librarian

WILLIAM A. KINNEY  
Chief News Bulletin Service

FRANKLIN L. FISHER  
Chief Illustrations Division

MAYNARD OWEN WILLIAMS  
Chief Foreign Editorial Staff

W. ROBERT MOORE  
Foreign Editorial Staff

LUIS MARDEN  
Foreign Editorial Staff

EDWIN L. WISHERD  
Chief Photographic Laboratory

WALTER M. EDWARDS  
Illustrations Division

KIP ROSS  
Illustrations Division

MASON SUTHERLAND  
Editorial Staff

HOWELL WALKER  
Editorial Staff

## BOARD OF TRUSTEES

GEORGE C. MARSHALL  
Secretary of Defense  
General of the Army, Retired

LEROY A. LINCOLN  
President Metropolitan Life  
Insurance Company

LYMAN J. BRIGGS  
Director National Bureau of  
Standards, Retired

ELISHA HANSON  
Lawyer and Naturalist

EMORY S. LAND  
Vice Admiral Construction Corps,  
U. S. Navy, Retired; President,  
Air Transport Association

GEORGE R. PUTNAM  
Commissioner of Lighthouses,  
Retired

FRANKLIN L. FISHER  
Chief Illustrations Division,  
National Geographic Magazine

ROBERT V. FLEMING  
President and Chairman of the  
Board, Riggs National Bank

CHARLES F. KETTERING  
Consultant and Director,  
General Motors Corporation

WILLIAM V. PRATT  
Admiral U. S. Navy, Retired

JUAN T. TRIPPE  
President Pan American Airways

DAVID FAIRCHILD  
Special Agricultural Explorer, U. S.  
Department of Agriculture

ALEXANDER WETMORE  
Secretary Smithsonian Institution

GILBERT GROSVENOR  
Editor of National Geographic  
Magazine

MELVILLE BELL GROSVENOR  
Assistant Editor, National Geographic  
Magazine

CHARLES G. DAVES  
Formerly Vice-President  
of the United States

LLOYD B. WILSON  
Formerly Chairman of the Board  
Chesapeake and Potomac  
Telephone Companies

L. O. COLBERT  
Rear Admiral U. S. Coast and  
Geodetic Survey, Retired

ERNEST E. NORRIS  
President Southern  
Railway System

JOHN OLIVER LA GORCE  
Associate Editor of the National  
Geographic Magazine

J. R. HILDEBRAND  
Assistant Editor, National  
Geographic Magazine

THOMAS W. McKNEW  
Secretary, National Geographic  
Society

## ORGANIZED FOR "THE INCREASE AND DIFFUSION OF GEOGRAPHIC KNOWLEDGE"

To carry out the purposes for which it was founded sixty-three years ago, the National Geographic Society publishes this Magazine monthly. All receipts are invested in The Magazine itself or expended directly to promote geographic knowledge.

Articles and photographs are desired. For material The Magazine uses, generous remuneration is made.

In addition to the editorial and photographic surveys constantly being made, the Society has sponsored more than 100 scientific expeditions, some of which required years of field work to achieve their objectives.

The Society's notable expeditions have pushed back the historic horizons of the northwestern United States to a period nearly eight centuries before Columbus crossed the Atlantic. By dating the ruins of the vast communal dwellings in that region, the Society's researches solved secrets that had puzzled historians for three hundred years.

In Mexico, The Society and the Smithsonian Institution, January 16, 1939, discovered the oldest work of man in the Americas for which we have a date. This slab of stone is engraved in Mayan characters with a date which means November 4, 291 B. C. (Spinden Correlation). It antedates by 200 years anything heretofore dated in America, and reveals a great center of early American culture, previously unknown.

On November 11, 1938, in a flight sponsored jointly by the National Geographic Society and the U. S. Army Air Corps, the world's largest balloon, *Explorer II*, ascended to the world altitude record of 72,395 feet. Capt. Albert W. Stevens and Capt. Orvil A. Anderson took aloft in the gondola nearly a ton of scientific instruments, and obtained results of extraordinary value.

A notable undertaking in the history of astronomy was launched in 1949 by The Society in cooperation with the Palomar Observatory of the California Institute of Technology. This project will require four years to photomap the vast reaches of space, and will provide the first sky atlas for observatories all over the world.

In 1948 The Society sent out seven expeditions to study the eclipse of the sun along a 5,300-mile arc from Burma to the Aleutians. The fruitful results helped link geodetic surveys of North America and Asia.

The Society granted \$25,000, and in addition \$75,000 was contributed by individual members, to help preserve for the American people the finest of the giant sequoia trees in the Giant Forest of Sequoia National Park of California.

One of the world's largest icefields and glacial systems outside the polar regions was discovered in Alaska and Yukon by Bradford Washburn while exploring for The Society and the Harvard Institute of Exploration, 1938.

Someone you love

IS HOPING FOR A HAMILTON

## Right . . . on Time!



At last he has graduated—to a Hamilton. What a proud moment. And how important in the years to come that you have given that someone you love the one watch world-famous for accuracy.

Did you know that each Hamilton has its own serial number and its own history of tests? They're pedigreed watches!

Like a baby's breath, the dainty hairspring of each Hamilton pulses in and out. It must vibrate 18,000 times an hour—not 18,001 or 17,999. That is why all Hamilton hairsprings are made of Elivar Extra—an exclusive Hamilton development—anti-magnetic, rust resistant and unaffected by temperature changes.



Today your dollar, despite rising prices, buys more in true watch value than ever before—when you buy a Hamilton.

While some timepieces meet some of the standards of fine watchmaking . . . and fewer still meet most . . . only one watch meets them all. And that watch is Hamilton.



The watch this boy looks at so proudly is the Boyd (at left), 14k gold-filled. Shown below: 1, Kirk, 14k gold; 2, Jenny, 10k gold-filled; 3, Grover, 10k gold-filled with bracelet. Every Hamilton is adjusted to temperature, mechanism and position.

Better jewelers everywhere have a wide selection of Hamiltons priced from \$49.50 to \$12,000. Send for FREE booklet "What Makes a Fine Watch Fine?" Hamilton Watch Co., Dept. C-1, Lancaster, Penna.

Copyright, Hamilton Watch Co., 1961



AMERICA'S FINE WATCH  
**Hamilton**

The Watch of Railroad Accuracy

Mention the National Geographic—It identifies you

To get the most fun on a European holiday—

# *Start Your Vacation in* **Switzerland**



**Ski in the Spring** in sunny Switzerland—where the temperature hits ninety and the snow is perfect! Enjoy the magnificent slopes of the Oberland, the Valais and the Engadine. You can go ski-joring, sleigh-hayriding or relax and let us serve you.

**Soak up the sun** on the palm-fringed shores of Lugano and Locarno, two of the largest of 1,484 crystal-clear Swiss lakes. Go where you want, when you want—four hours by train take you almost anywhere in Switzerland. And tourists save up to half on special Swiss rail and bus fares.



The man to know  
before you go  
is your  
**TRAVEL AGENT**

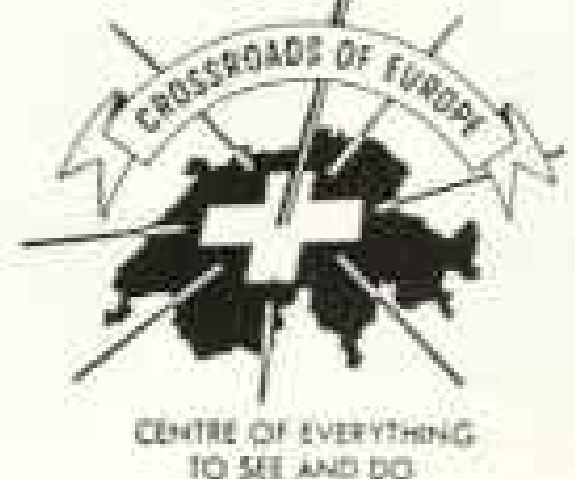
**Sample superb cookery** (here it's cheese fondue) everywhere you go—from sophisticated hotels to storybook inns. Enjoy the best of Swiss, French and Italian dishes, with unsurpassed service—and live as economically as at home.



**There's an exciting reason every season  
to start your vacation in SWITZERLAND**

*For full information and free booklets, write: Dept. M62A*  
**SWISS NATIONAL TOURIST OFFICE**

475 Fifth Ave., New York, N. Y. • 661 Market St., San Francisco, Cal.



Mention the National Geographic—It identifies you

# NEW 19<sup>inch</sup> G-E

*Big as you'll ever want!*



Here's all you ever dreamed of in a television instrument! Super life-size 19" G-E pictures of breath-taking lifelike quality—result of all the improvements *combined exclusively in G-E Black-Daylite Television*. Now, enjoy pictures so true to life you'll feel they're real! Distinguished cabinetry, veneered in richly grained, genuine mahogany, hand-rubbed to enhance its beauty. New Model 19C105 is truly an enduring investment—in enchantment! **\$499.95\***

*General Electric Company, Electronics Park, Syracuse, N. Y.*



**BLACK-DAYLITE  
TELEVISION**

\*Includes Fed. Tax, Installation and Picture Tube Protection Plan Extra. Prices are slightly higher West and South, subject to change without notice.

*You can put your confidence in—*

**GENERAL  ELECTRIC**

Mention the National Geographic—It identifies you.



"We discovered  
**Alaska**  
 with all its  
 adventure  
 and romance"



"Excitement began as soon as we boarded our **Canadian Pacific** train for Vancouver. The accommodations were luxurious...modern, air-conditioned rooms...soft, wide berths...tempting food. The Canadian Pacific service was superb too, and the people we met made the trip friendly and gay.

"We sailed to Alaska in luxury. The Princess liner we boarded at Vancouver for the 2000-mile trip up the Inside Passage was a resort afloat. Impromptu deck parties during the day...dancing and movies at night. Adventure met us when we docked at Skagway, Alaska. Inland trips to the historic Gold Rush country. Fjords and the Midnight Sun...glaciers, totem poles—a camera fan's paradise! (All this for as low as \$150 round-trip from Vancouver.)"



**P.S.** "Our local travel agent made all the arrangements for us . . . without charge. Next year he will help us plan a **Canadian Pacific White Empress** voyage to Europe. It costs as little as \$249 First Class."

**Canadian Pacific**

**SPANS THE WORLD**

Railways • Steamships • Airlines  
 Hotels • Communications • Express



SEE YOUR LOCAL AGENT OR CANADIAN PACIFIC IN PRINCIPAL CITIES IN U.S. AND CANADA

Mention the National Geographic—It identifies you





IN CANADA YOU CAN GET AWAY, QUICKLY, ONTO UNCROWDED HIGHWAYS, INTO THE GREAT OUTDOORS



Scottish accent at the Gaelic Mod, Cape Breton Island, Nova Scotia.



Outdoor lake events are a link with the past of storied Quebec province.

HERE'S A NEW WORLD where beauty beckons and every hour is a fresh adventure. Feast your eyes and click your camera in Canada's "picture spots". Camp and paddle and fish in wooded lake country. Join the fun at seaside resorts. Enjoy a re-union with relatives or friends... *Your* idea of a perfect vacation is waiting for you in Canada. Write for information or use the handy coupon below.

Cross the friendly border into  
CANADA...VACATIONS UNLIMITED



Waterton Lakes National Park (above) is one of many vast park areas preserved for wild life...and tired city dwellers.



CANADIAN GOVERNMENT TRAVEL BUREAU  
Ottawa, Canada  
D. Leo Dolan, Director

Please send me your illustrated book,  
"CANADA, VACATIONS UNLIMITED"

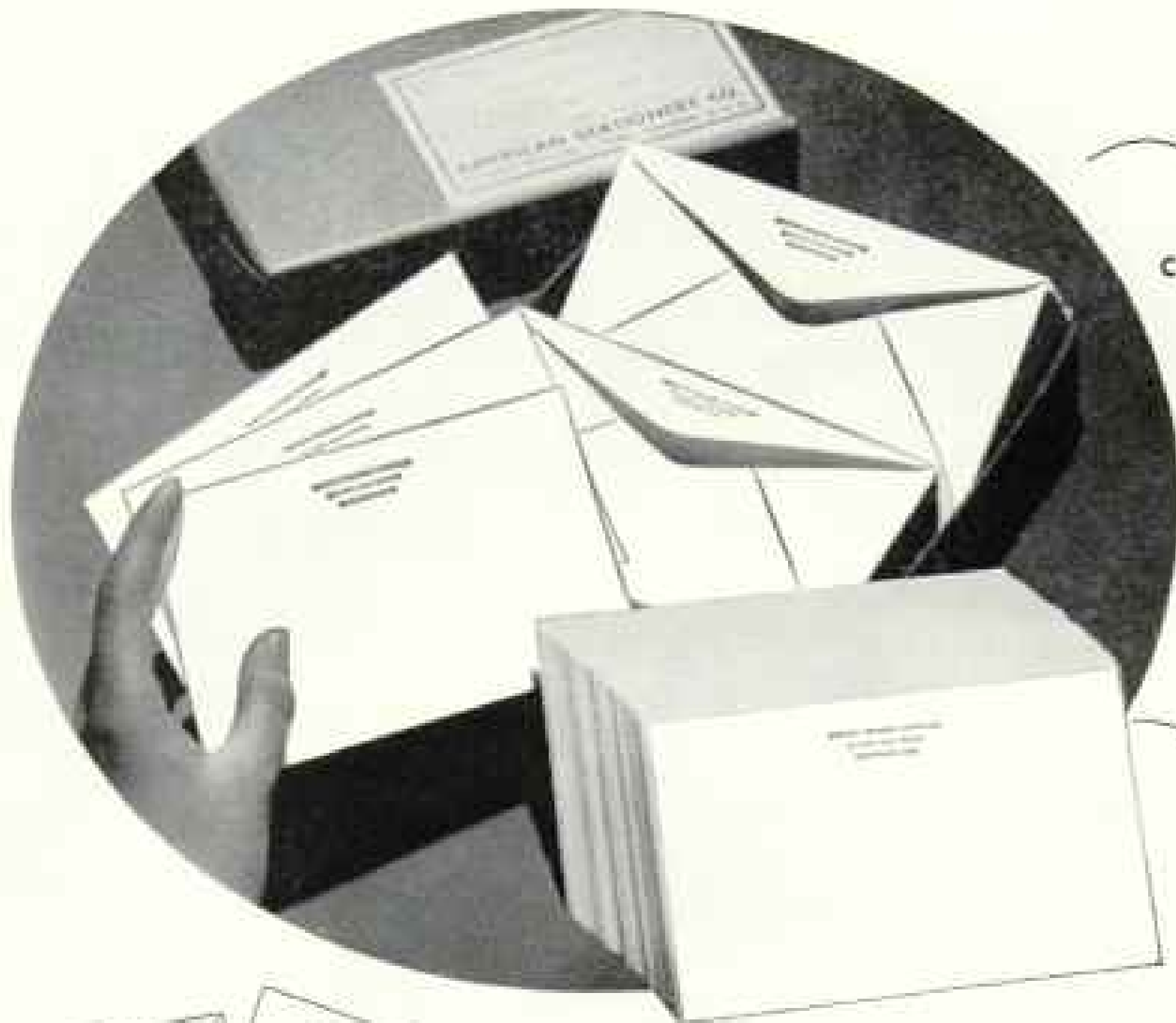
Name \_\_\_\_\_  
(Please Print)

Street and No. \_\_\_\_\_

Town \_\_\_\_\_ State \_\_\_\_\_

01-1-13-51-02

# If You Prefer Correspondence Cards...



CORRESPONDENCE  
CARD  
PACKAGE

100 Correspondence Cards  
100 Envelopes  
*All printed with your  
name and address*

**\$1.50**



**STANDARD  
PACKAGE**

200 NOTE SHEETS (size 6 x 7) and  
100 NEW, IMPROVED ENVELOPES.  
Crisp, white rag content  
bond paper. Printed with  
name and address. Only

**\$1.00**



**ENVELOPE  
PACKAGE**

200 TIGHT-SEAL ENVELOPES  
ONLY (envelopes as in the Standard  
Package). A perfect seal  
with the slightest pres-  
sure. Printed. Only . . . .

**\$1.00**



**TABLET  
PACKAGE**

200 SINGLE SHEETS, tableted, and  
100 ENVELOPES. Identical to Stand-  
ard Package in size and  
quality. All printed with  
name and address . . . .

**\$1.25**



**DELUXE  
PACKAGE**

125 LONG STYLE SHEETS (size  
6 1/2 x 10 1/4) and 125 LONG STYLE  
ENVELOPES in Amer-  
ican rag content bond  
paper. All Printed . . .

**\$2.00**

Many American Stationery users complement their informal and household business stationery with the handy-size (3 1/2 x 6) correspondence cards. These cards are so convenient.

They are correct in color, size, weight, and printing. The cards are high-quality white vellum. The printing of your name and address on each sheet and envelope is in rich blue ink. Your mail is clearly identified. It can't go astray!

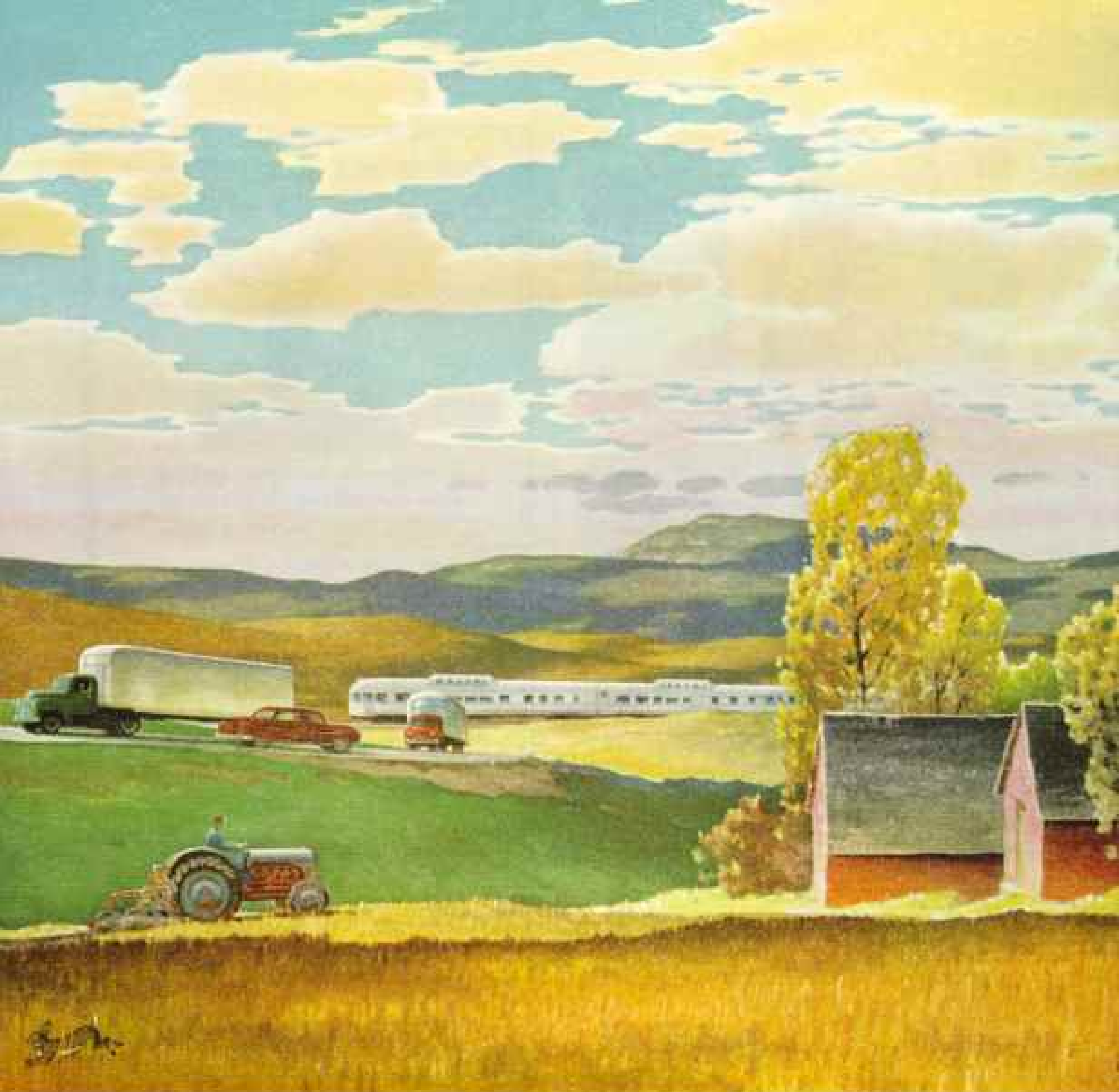
And they're so inexpensive — 100 quality cards and 100 envelopes, printed, for only \$1.50. Another great American Stationery value! Try a package.

Order in quantities as listed. No "split-package" orders accepted. Maximum printing — 4 lines, 30 characters per line. Remit with order. West of Denver, Colorado, and in U.S. possessions, add 10% to prices. (No foreign orders). We pay the postage. *Satisfaction guaranteed.*

THE AMERICAN STATIONERY COMPANY  
300 PARK AVENUE • PERU, INDIANA



THE FINE STATIONERY  
IN THE PLAIN BOX



If the automobile industry were as concentrated in Detroit as many people think it is, the city would have to cover most of Michigan.

The truth of the matter is that almost every city of any industrial consequence contains factories contributing directly to the building of automobiles. Literally thousands of companies are involved.

One of them is The Budd Company, fabricating automobile body components, wheels, brakes, drums and hubs. In a typical month, every working day sees Budd pouring into the stream of supplies to automobile, truck and highway trailer manufacturers enough products to fill two hundred and sixty-seven freight cars.

All this, of course, is in addition to the production of the beautiful all-stainless steel Budd railway passenger cars which have brought new pleasure, comfort and safety to railway travel both in this country and abroad.

The demand for the things Budd makes has quadrupled the business in the last ten years.

The Budd Company, Philadelphia, Detroit, Gary.

**Budd**

**PIONEERS IN BETTER TRANSPORTATION**



## STEP ON IT, FOLKS!

It's time to settle those vacation plans. Our colorful, newly printed 32-page picture booklet "There's More in Pennsylvania" can help a lot. It's loaded with helpful, interesting information about the mountains and rolling hills, the lakes and rivers, the forests and farmlands that have made this one of America's favorite playgrounds. You'll find good times in the Poconos, Ligonier Valley, and the Sullivan Highlands; in the Northern Tier and Blue Ridge Summit areas; in the country round Eagles Mere, Erie, Conneaut Lake, Bedford, Bedford Springs, Wellsboro, and Cambridge Springs. There are famous historic shrines like Gettysburg and Valley Forge. There's wonderful fishing and hunting. There's rare scenic beauty. There's swimming, sailing, golf, tennis, riding... something for every member of the family. Write today for the '51 reasons you'll enjoy a Pennsylvania vacation.

YOU'LL FIND MORE IN

# Pennsylvania

PENNSYLVANIA DEPARTMENT OF COMMERCE  
DIVISION 202, HARRISBURG, PA.



I want to know more. Please send me your

- New free booklet on Pennsylvania Vacationlands
- 1951 Fishing Accommodations booklet
- 1951 Boys' and Girls' Summer Camps booklet

Name: .....  
Address: .....  
City: ..... Zone: ..... State: .....

Year in and year out you'll  
do well with the HARTFORD



— all forms of fire, marine  
and casualty insurance and  
fidelity and surety bonds.

See your Hartford agent or insurance broker

HARTFORD FIRE  
INSURANCE COMPANY  
HARTFORD ACCIDENT  
AND INDEMNITY COMPANY  
HARTFORD LIVE STOCK  
INSURANCE COMPANY  
HARTFORD 15, CONNECTICUT

## America's Finest



### Case ONE-PIECE WATER CLOSET

The only water closet with so many modern features. The Case One Piece is the mark of a thoughtfully planned bathroom. Noted for its exceptionally quiet operation. It does away with the old-fashioned raised tank, and is newly styled with lower seat level and special non-overflow protection. In white and 20 wonderful colors. Fine vitreous china construction.

#### THE MATCHING LAVATORY

Elegant "Dew" of the One Piece water closet—the new "Windfall" features a wide shelf back, concealed non-overflow and chromium plated brass trim. With or without towel bars.

—SEND FOR FREE FOLDER—

W. A. Case & Son Mfg. Co.  
Founded 1852  
23 Main Street, Dept. 7  
Buffalo 3, New York  
Send me your new  
bathroom fixture  
folder.

Name: .....  
Address: .....  
City and State: .....



THE WESTBURY series II, by Du Mont, with 19-inch direct-view Lifetone® picture.

Du Mont  
*for the finest*  
 Electronic Tuning



*in television*

The noticeably better tuning you get in Du Mont television receivers is due to the Du Mont Sensituner\* and the Du Mont Selectuner,\* the most accurate, sensitive and selective tuning devices in television. Finer tuning, however, is only one of the many unique features that insure real satisfaction to Du Mont owners . . . the kind of satisfaction that always comes from owning a masterpiece. For Du Mont has always chosen to be creator of the best to suit the most discriminating.



*First with the finest in Television*

**DUMONT**

\*Trade Mark

Copyright 1951, Allen B. Du Mont Laboratories, Inc., Television Receiver Division, East Paterson, N. J. and the Du Mont Television Network  
 515 Madison Avenue • New York 22, N. Y.

# Fishermen!



**FREE**



## Beautiful Colorful Shakespeare 1951 Tackle Book and Fishing Calendar

### Featuring:

- Joe Godfrey's Fishing Calendar—Shows Best Days to Fish!
- Casting lessons, fishing tips, "Balanced Tackle" Suggestions by U. S. Champion Ben Hordesty and Shakespeare Board of Experts.
- "Fitting the Tackle to the Man—or Woman"—by Jason Lucas, famous Angling Authority.
- New Direct Drive Reels with LQT NYLON Gears—the tackle sensation of the year.
- Genuine Shakespeare Howald-Process Fiber Glass Wonderods. New Low Prices!
- Wexford Wonder Line, Black and "Invisible."
- The Shakespeare President Reel—NOW built with 3 miracle materials—Carbonyl, Nylon and "18-8" Stainless Steel.
- Famous Shakespeare Wondereels that Make You a Fisherman in 5 minutes.

**Shakespeare**  
RODS • REELS • LINES • BAITS



The Shakespeare Company, Dept. NG-2, Kalamazoo 2, Michigan

Please send me your FREE 1951 Tackle Book and Fishing Calendar.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Before purchasing bedroom and dining room furniture, shop and compare for style, quality, and value. A visit to the Rway showroom will be a convincing experience. No obligation. Purchases may be arranged only through authorized Rway dealers.



For years known as  
NORTHERN FURNITURE

See phone book for nearest showroom in

- |            |              |
|------------|--------------|
| Baltimore  | Kansas City  |
| Boston     | Milwaukee    |
| Chicago    | Minneapolis  |
| Cincinnati | New York     |
| Cleveland  | Philadelphia |
| Dallas     | Pittsburgh   |
| Detroit    | St. Louis    |
|            | Shelbygan    |

## PHOENIX

has your fun roped, tied, and waitin'!

Out here in the Valley of the Sun we're branding a vacation just for you — riding desert trails, exploring, swimming, golfing, picnicking, or just loafing in the warm, dry sunshine. Come now and dally in the Valley of the Sun.

VALLEY OF THE SUN CLUB, DEPT. G4

Please send free colorful folders to:

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

SOME  
**NEW THINGS**

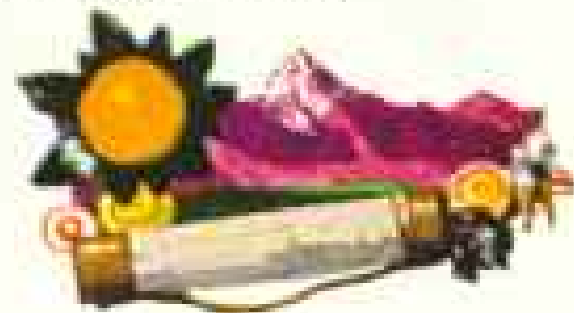
HAVE BEEN ADDED TO

*Southern  
California!*

Exciting changes have  
made the land of oranges  
and sunshine more fun  
than ever...



**YOU'LL EXPLORE MORE OF THE  
DESERT AND MOUNTAINS!** New  
highways into the mysterious des-  
ert... up to the high land of blue  
lakes, fast streams.



**OCEAN AND SUBTROPICAL VAL-  
LEYS!** Express highways through  
orange groves to the Pacific—  
whitesands, pelicans, flying spray.



**THERE'S MORE FOR YOU IN  
MOVIELAND!** Homes of the stars,  
fine cafes, movie premieres, radio  
shows, seven television stations.



**HORSE RACING MOST OF THE YEAR**  
at three world-famous tracks. See rodeos,  
regattas, speedboat meets, polo matches.

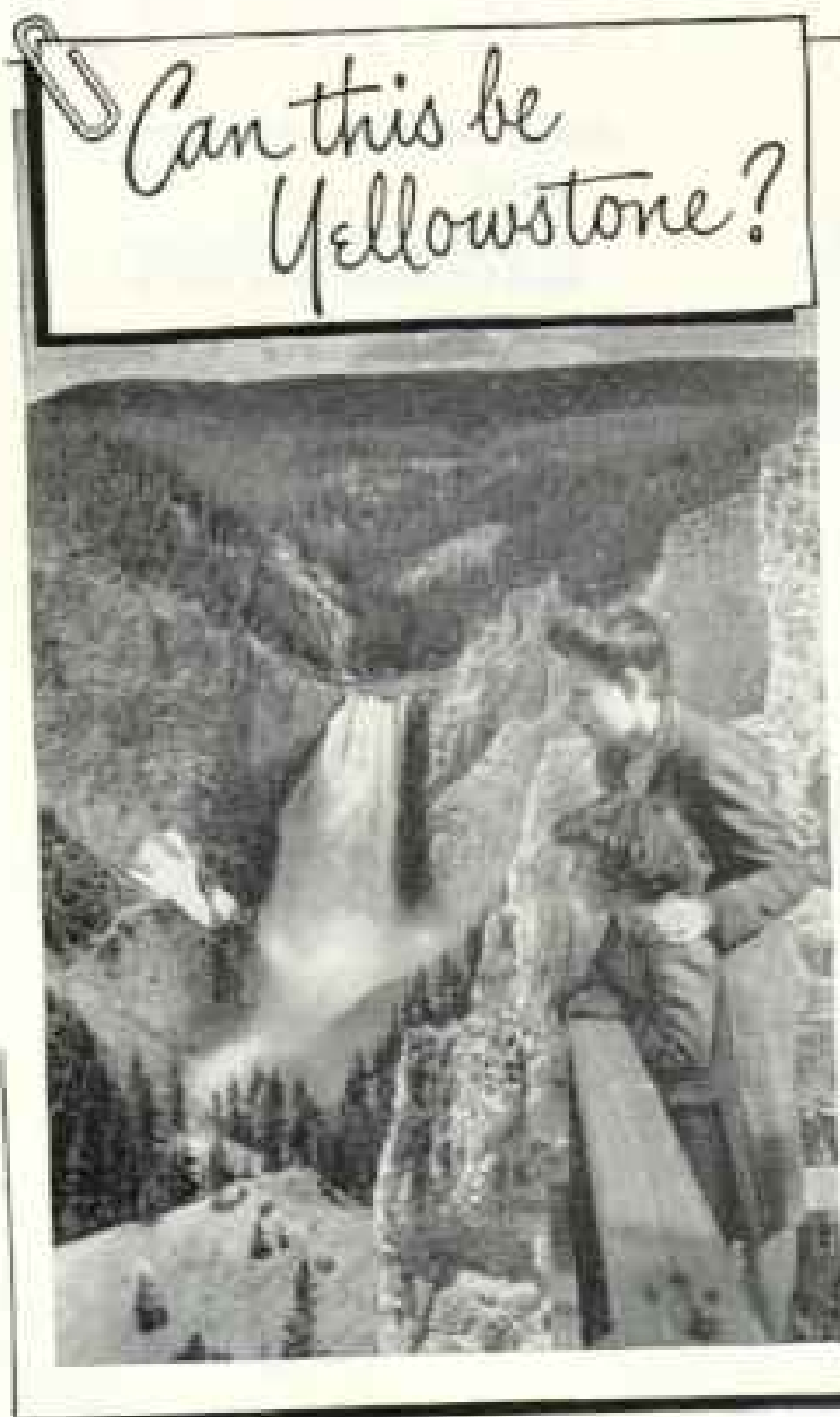
*America's 4-Season Vacationland*

**THE WEATHER HASN'T CHANGED.**  
Thanks to our dry subtropical cli-  
mate, you can enjoy Los Angeles  
County and all Southern Califor-  
nia—winter, spring, summer, fall.  
Ample tourist accommodations.

**PLAN YOUR TRIP NOW!** Write  
for the **FREE COLOR FOLDER** to the  
All-Year Club of Southern Califor-  
nia, Ltd., Dept. C-2, 629 So.  
Hill Street, Los Angeles 14, Calif.

ALL-YEAR CLUB OF SOUTHERN CALIFORNIA, LTD. This advertisement sponsored by  
the Los Angeles County Board of Supervisors for the citizens of Beverly Hills,  
Glendale, Hollywood, Long Beach, Los Angeles, Pasadena, Pomona, Santa Monica  
and 182 other communities. Copyright, 1951, by All-Year Club of Southern  
California, Ltd.—a non-profit community organization serving vacationists.

Advise anyone not to move here now unless assured in advance of employment.



Perhaps you've thought of Yellowstone as the land of frolicking bears and frothing geysers. It is. But it's also the home of the spectacular Grand Canyon of the Yellowstone, pictured here . . . of an unspoiled wilderness . . . rugged peaks . . . sparkling trout streams. Want to add *extra* enjoyment to your Yellowstone trip next summer? Ask your **Travel Agent** to route you via the streamlined **North Coast Limited**. Choose from three entrances to the Park—including the thrilling Red Lodge High Road trip over the Beartooth Rockies.



Write now for our **FREE ILLUSTRATED YELLOWSTONE BOOKLET**.

Address **G. W. Rodine, 500 Northern Pacific Railway, St. Paul 1, Minn.**



**NORTHERN PACIFIC RAILWAY**

*Main Street of the Northwest*

The most wonderful travel adventure of all...

# South Africa



... plus a superb voyage aboard a modern luxury liner—an unforgettable vacation in itself!

South Africa's spectacular scenery, delightful climate, beaches and lakes will captivate you. Modern cities, Zulu villages, big game hunting, motor, camera safaris . . . nowhere else do so many new experiences await you.



**SAILING REGULARLY**—the luxury liners *African Endeavor* and *African Enterprise* assure a glorious ocean crossing . . . finest accommodations, service, cuisine. New York to Capetown, \$650 up.

For full information, see your Travel Agent or write Dept. A.

## FARRELL LINES

24 BEAVER STREET, NEW YORK 4, N. Y.



## VACATION IN MONTANA

IN SCENIC PLACES — AMONG FRIENDLY PEOPLE

In Montana, everybody fishes, makes, sightsees. There are dude ranches, casinos, Indian ceremonies to enjoy. Lewis and Clark Caves, State park, trout beds, hotlands, primitive areas to explore. Cold water lakes and natural hot spring pools to swim in and good highways to get you everywhere.

Glacier and Yellowstone parks are a north-and-south continuation of Montana's natural scenic beauty.

SEE BOTH GLACIER AND YELLOWSTONE PARKS

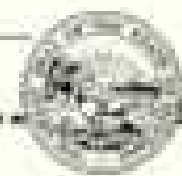
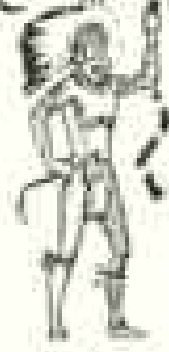
CLIP AND MAIL FOR FREE VACATION INFORMATION

Advertising Director, Dept. 51-1  
Montana Highway Commission  
Helena, Montana

Please send me free literature on Montana.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_







*Heart to Heart*

**I LOVE** to board my Central train at a central, downtown station.  
**From city's heart to city's heart...it's an *overnight vacation!***



**I LOVE** to have refreshments  
 When the business day is done,  
 In a New York Central lounge car,  
 Where just relaxing's fun!



**I LOVE** to dine at leisure  
 From a table set in style,  
 And enjoy my fresh-cooked dinner  
 With a fresh view every mile!



**I LOVE** my hotel-room-on-wheels,  
 With bed of rubber foam,  
 Where I sleep just as soundly and  
 As SAFELY as at home!



**I LOVE** the way my room's equipped  
 With everything at hand  
 To wash and dress. When I arise,  
 Such privacy's just grand!



**I LOVE** to have my mind at peace,  
 From weather worries free.  
 No slippery roads or stormy skies  
 Upset my plans or me!  
 I step off fresh and rested,  
 Next morning when I'm due.  
 Yes, I love Central travel,  
 Just try it. So will YOU!

**New York Central**

The Water Level Route—You Can Sleep



*You'll Love*  
**New York Central's Dreamliners**

New York—Chicago  
**30TH CENTURY LIMITED**  
**COMMODORE VANDERBILT**

Chicago—Boston  
**NEW ENGLAND STATES**

St. Louis, Indianapolis—  
 New York, Boston  
**SOUTHWESTERN LIMITED**

Dayton, Columbus  
 Cincinnati—New York  
**OHIO STATE LIMITED**

New York—Cleveland  
**CLEVELAND LIMITED**

New York—Detroit  
**THE DETROITER**

*And many others!*

# The BEST THINGS in Colorado are FREE



## SEE more...SAVE more...VACATION EARLY

Go where you will...nowhere in America will you find so much for so little. Scenic wonders unsurpassed in the world are yours without charge.

Your first deep breath of the clear, clean air, the awe-inspiring panorama of the Rockies, will convince you that here you will refresh your mind and body...here you will regain health and vigor.

This year, come to Colorado early. Enjoy the bonus thrill of seeing America's top state freshly emerged from a season of cleansing snows. Enjoy the freshness of newly decorated accommodations. Be here when the curtain rises on horse and dog racing, baseball, and other spectator sports. Fish the freshly stocked streams and lakes. Help usher in the brilliant summer social season including concerts in the famous natural Red Rocks Theatre and the legitimate stage.

Add to your life, to your happiness, to your store of memories. See and enjoy Colorado this year.

### WRITE NOW FOR FREE LITERATURE

**DENVER** CONVENTION & VISITORS BUREAU  
Dept. S-251, 225 W. Colfax, Denver, Colo.

- |  |  |
|--|--|
| <input type="checkbox"/> 40-page booklet, "Denver, Year-round Vacation Center" | <input type="checkbox"/> Directory of Hotels and Motels    |
| <input type="checkbox"/> Colorado Scenic Highway Map                           | <input type="checkbox"/> Mountain Resorts and Dude Ranches |

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

"YEAR-ROUND VACATION CENTER"

"WHILE THESE BELLS RING, SAFELY REST. FREEDOM LIVES!"



### Bells that Voice a Nation's Faith

CHOSEN as the National Evening Hymn Memorial Carillon, "Carillonic Bells" are sending forth their message of gratitude and inspiration at Arlington Cemetery, Virginia. The superiority of this Schulmerich instrument as a living memorial is attested again and again, as churches, universities, and public buildings continue to honor us by selecting it. Prices are low—and no tower is required. Write...

## CARILLONIC BELLS

Schulmerich Electronics, Inc.  
3211 Carillon Hill, Sellersville, Pa.

## BEFORE YOU BUY

## ANY BINOCULAR... COMPARE!

You'll be amazed the first time you look through a Bausch & Lomb Binocular. For a glass that will give you a lifetime of pleasure and service, don't be satisfied with less in performance. Write for 32-page Bausch & Lomb booklet which tells how to choose a binocular for your own use. Bausch & Lomb Optical Co., 433 Lomb Pk., Rochester 2, N. Y.



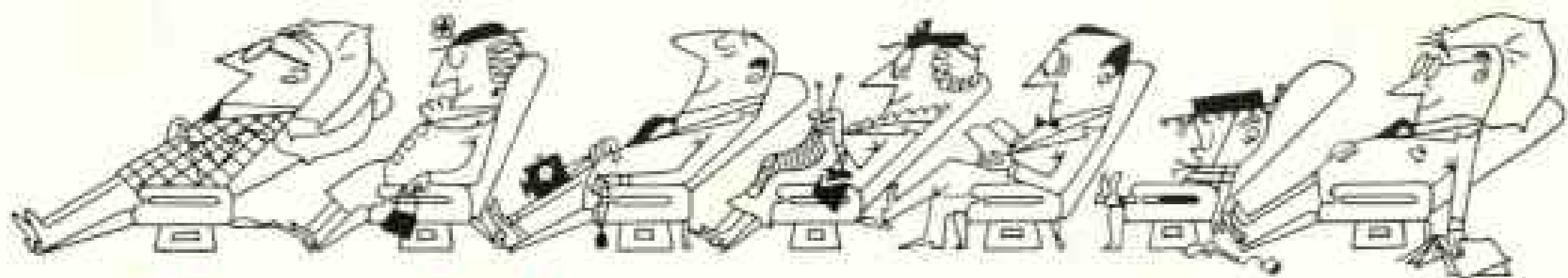
Bausch & Lomb  
Zephyr-Light  
7x-35mm Binocular  
Patented Optics \$155. plus tax.

# The most talked-about train in the country!



## you'll see more

...Vista-Dome views of magnificent mountain scenery! Look UP! Look DOWN! Look ALL AROUND!



## you'll be more relaxed

...in the comfort of a Vista-Dome Reclining Chair Car or luxurious sleeping car!



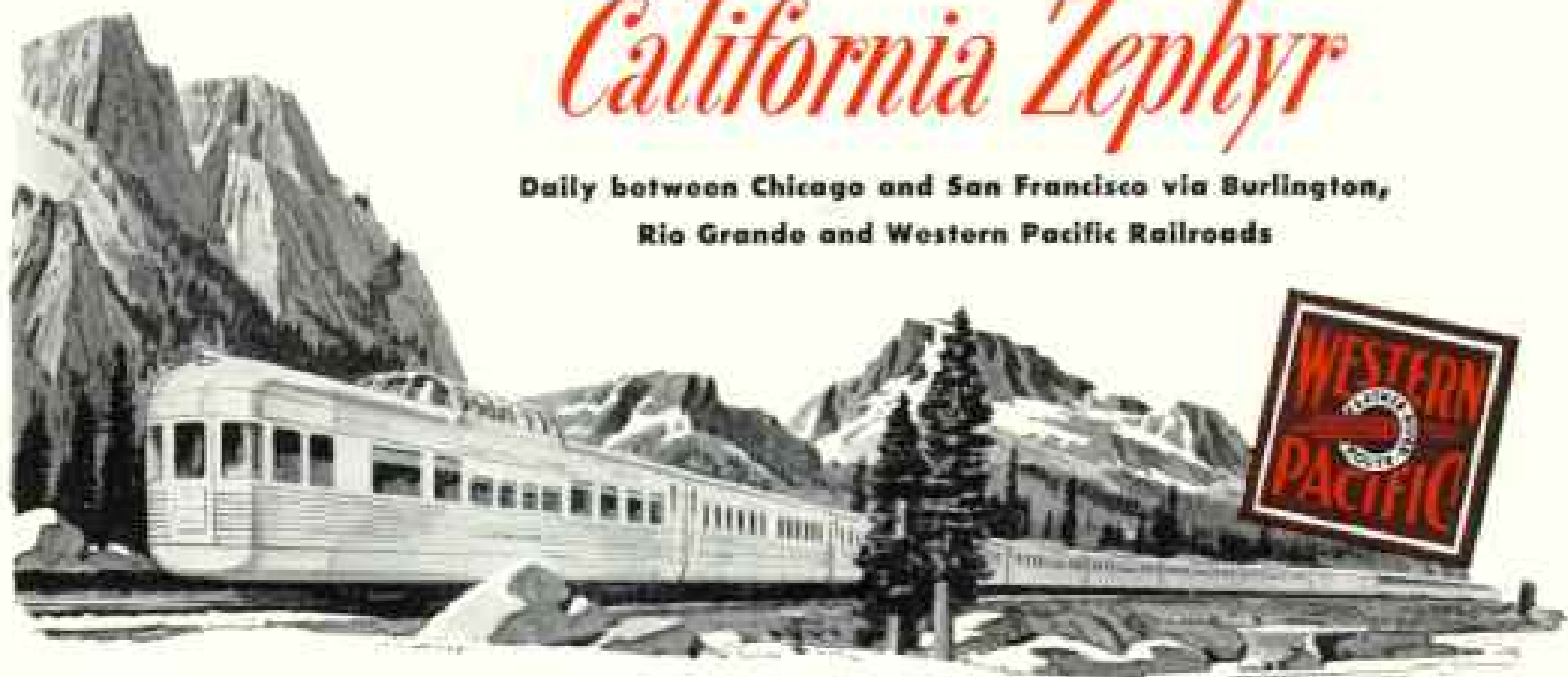
## you'll have more fun

...in the two Lounge Cars, Dining Car, five Vista-Domes! All this at NO EXTRA FARE!

## THE VISTA-DOME

# California Zephyr

Daily between Chicago and San Francisco via Burlington,  
Rio Grande and Western Pacific Railroads



Include Southern California via San Francisco — No additional rail fare! Write Dept. G, Western Pacific Railroad, 526 Mission St., San Francisco, Calif.

## SPECIAL INTRODUCTORY OFFER

This  
LONG-PLAYING  
Record  
(33 1/3 R. P. M.)



ISSUED BY  
*Concert Hall  
Society*

MOZART CONCERTO IN F  
OR VIVALDI SYMPHONIES IN C & F

Only \$1<sup>00</sup>

HERE is an extraordinary opportunity for music lovers! We will send you your choice of Vivaldi's sparkling symphonies—or Mozart's delightful piano concerto, superbly performed by the Concert Hall Symphony Orchestra, Henry Swoboda conducting. Both are high-fidelity Concert Hall recordings—yet you may have either one for only one dollar!

We make this special offer to demonstrate the remarkable quality of these high-fidelity recordings. Only by actually hearing one of these discs can you appreciate their extraordinary clarity and tonal beauty.

We will also send our free brochure telling how you can possess our new series of original recordings on unbreakable "Vinylite" plastic—FIRST EDITIONS available nowhere else at any price!

### SUPERB MUSIC—Membership is Limited to 3000

Just as an artist limits the impressions from a fine etching, so the Society limits its editions, capturing in recordings of singular quality every susceptible subtlety of tone and phrasing.

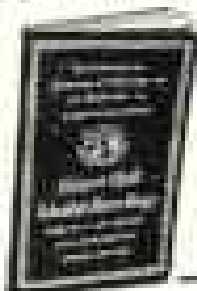
Only 8,000 members can own these recordings; and right now only 362 subscriptions are still available. Commercial recordings go through four stages, each step involving a loss of tonal quality. But LIMITED EDITION recordings are produced directly from gold-sputtered masters!

And what superb music! Timeless works of Beethoven, Schubert, Ravel, Brahms, Mozart, Hindemith . . . over 50 works from which you may choose.

**The Cost is Surprisingly Low**  
The records come in a luxurious album bearing

your personal subscription number. They will grow into a treasured group of "Collector's Items" which only this inner circle of music lovers can possess. Yet these "custom-made" recordings cost only a few pennies more than commercial, mass-produced discs made of "Vinylite" brand plastic!

The whole interesting story is told in our free brochure, which we will send with the LONG-PLAYING record described above. Simply enclose one dollar with the coupon. If not delighted with the record, you may return it in five days and your dollar will be cheerfully refunded.



Concert Hall Society, Inc.  
250 West 57th St., New York 19, N.Y.

332

Enclose one dollar, for which please send me the high-fidelity LONG-PLAYING record described below. If not delighted, I may return it in five days for full refund of my dollar. Also send, free, your brochure describing the new (300.00) series of Limited Edition recordings.

MOZART  VIVALDI

Name .....

Address .....

City ..... Zone ..... State .....

# World's Finest...

Television

Phonograph

and Radio

# SCOTT

You—the owner of a magnificent Scott instrument! Bring these priceless pleasures into your home for you and yours—the pride of owning the finest there is! Scott is engineered, designed and created for the discriminating. See and hear the Scott instruments at your Scott dealer.

SCOTT Radio Laboratories, Inc.  
Chicago 40, Illinois

## Fishermen SEND FOR THIS BOOK

100 Pages of FISHING TIPS



5th Edition

248 priceless tips on fishing, hunting, camping—as gathered by the Fishing and Hunting Club of the Air, Edited by Cal Johnson, famous fisherman-author. 300,000 have sent for it! Get yours! Send 10c to cover mailing costs.

JOHNSON MOTORS  
4600 Pershing Rd., Waukegan, Ill.

JOHNSON SEA-HORSE  
OUTBOARD MOTORS

You'll find  
412,000 sq. miles of  
glorious Vacationland



# in Ontario

All year  
CANADA'S VACATION PROVINCE

Write for free booklet: ONTARIO TRAVEL,  
127-A, Parliament Bldg., Toronto, Ont.



Automatic Blankets  
As low as  
\$44.95\*

**ZERO NIGHTS, RAW WINDS!**  
Be cozy comfortable under one

## **NEW GENERAL ELECTRIC AUTOMATIC BLANKET**

Picture yourself . . . snug, relaxed, no matter what the weather! That's the joy of this new G-E Blanket . . . automatic, dependable comfort.

No need for piles of heavy covers to keep warm. As the temperature drops, your G-E Blanket will send just enough more "sunshine" through its downy lightness to keep you constantly cozy.

Then, too, there's the bliss of a pre-warmed bed!

Snap your G-E Blanket on before you struggle in bed, to start your best night's sleep ever!

Choose from rose, blue, green or cedar in single- or double-bed sizes, one- or two-control models. Costs more than some makes, and it's well worth it! Now available at your G-E retailer, General Electric Company, Bridgeport 2, Connecticut.

*\*Prices subject to change without notice.*



Guardian of your comfort, the G-E Bedside Control, a marvel of engineering accuracy. On it, dial the degree of warmth you like. Your blanket automatically maintains that warmth through normal ups and downs in room temperature.



Consider the economy of buying one G-E Blanket for each bed. Takes the place of 3 ordinary blankets; saves storage space, bedmaking time, laundry costs. (G-E Blanket washes beautifully.) Costs only a few cents a night to operate.

More than 1,000,000 users have placed their confidence in G-E Automatic Blankets

**GENERAL**  **ELECTRIC**

# Pilgrimage

T I M E



## in MISSISSIPPI



### NATCHEZ

March 3 through April 1, 1951

Six tours; 30 of the South's most magnificent homes; beautiful gardens; Confederate Pageant; Spirituals.



### COLUMBUS

April 6 through April 8, 1951

Conducted tours; 15 ante-bellum homes; formal and informal gardens; special entertainment.



### HOLLY SPRINGS

April 22 through April 29, 1951

Conducted tours; 14 lovely ante-bellum homes in settings of natural beauty; priceless antique furnishings.



Mississippi Agricultural & Industrial Board  
State Office Building, Jackson, Miss. NG 2-51  
Please send pictorial pilgrimage folder on Natchez   
Columbus  Holly Springs

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

**THE HOSPITALITY STATE**



## 5-HP GRAVELLY Tractor

Offers 20 Tools to Save You Work!

Now . . . more time to enjoy your home—with less work! With the dependable Gravelly Tractor, POWER does every lawn, garden and field job! . . . The Gravelly is economical, convenient—a lifetime investment in better living.

All-gear drive, power reverse. Only the Gravelly does so many jobs so well!

"Power vs Drudgery" tells you how to put POWER to work for you! Write today!



**FREE**

GRAVELLY MOTOR FLOW & CULTIVATOR CO.  
BOX 388 DUNBAR, W. VA.

## NEW ORLEANS BY Mississippi River

20 DAY CRUISES

By Modern River Steamer  
Curt. D., to New Orleans & Return  
Mar 24-Apr 14-May 12-Sep 8-29

Fare (All Expenses) \$225 up plus tax  
See Your Local Travel Agent or Write

GREENE LINE STEAMERS, INC.

301 Public Landing  
Cincinnati 2, Ohio



## "SHINING MOUNTAINS"

Really Shine

## on a DA-LITE<sup>®</sup> SCREEN

You will be amazed at the sparkling brilliance and life-like realism of your movies and slides on a Da-Lite Crystal-Beaded Screen. Write for FREE screen fabric sample!



All leading dealers everywhere

Quality Screens Since 1928

DA-LITE SCREEN CO., Inc.  
2753 N. Pulaski Ed., Chicago 39, Ill.



# OLDSMOBILE

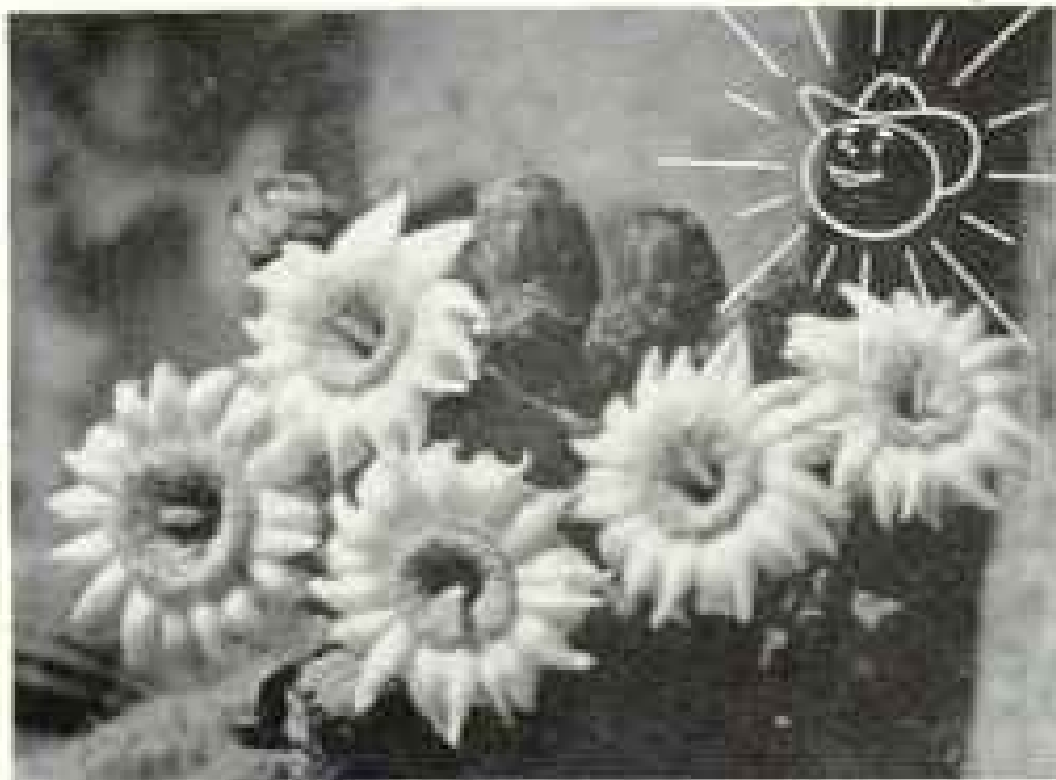
LAUNCHES AN  
ALL-TIME GREAT...  
ALL-NEW "ROCKET"  
SUPER



*\*Oldsmobile Hydra-Matic Drive standard equipment on Series "98"—optional at extra cost on Series "88" models.*

A General Motors Value

Brand new gas-saving "Rocket" Engine! Leader in high compression! Brilliant new Body by Fisher... bigger, wider, smarter, too! Luxurious new styling inside and out! More beauty—comfort—room and view! Completely new chassis—even smoother "Rocket" ride! A great new advancement in Hydra-Matic Drive! See the triumphant new "Rocket 88"—and the glamorous new "Rocket 98"—at your Oldsmobile dealer's.



DISCOVER THE MAGIC of the desert as it bursts into bloom in the early spring. You'll blossom, too—because Tucson has more sunshine than any other resort city.

*You'll find sun+fun  
and desert flowers in  
warm, dry Tucson*

**THRILL TO WESTERN HOSPITALITY.** Tucson offers plentiful accommodations of all kinds at sensible rates... smart hotels, colorful guest ranches, ultra-modern motels, apartments and cottages. Accredited ranch and public schools. University of Arizona. Come now... soak up the sun. Swim in outdoor pools. Ride horseback. Golf at fine country clubs. Drive down the new paved highway to Guaymas in friendly Old Mexico for marvelous fishing, hunting, shopping. Celebrities in music and fine arts will attend Tucson's Festival of the Arts, coming this spring. Plan to enjoy it, too. Send coupon below to Tucson Sunshine Climate Club, 5004-E Pueblo, Tucson, Arizona, for free booklet.



THIS WINTER YOUR PLACE  
IN THE SUN IS

**TUCSON**  
IN FRIENDLY ARIZONA

**SEND FOR FREE ILLUSTRATED BOOKLET**

TUCSON SUNSHINE CLIMATE CLUB  
5004-E Pueblo, Tucson, Arizona

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

I am interested in: (type of accommodation) \_\_\_\_\_

(type of school) \_\_\_\_\_ (information on) \_\_\_\_\_

## People who know Picture-taking and picture-making— PREFER THE Stereo Realist

THE CAMERA THAT PUTS 3rd DIMENSION ON FILM



**Harold Lloyd** Famous Movie Star, Producer, Director uses the Stereo-REALIST for his personal pleasure.

**Says:** "I own one, I use it, I love it. It takes the most amazing pictures I've ever seen."

You'll agree with Harold Lloyd once you actually see some Stereo-REALIST slides. It's a startling experience—words won't describe it. In third dimension, people are so life-like you almost expect them to speak... flowers so real you can smell their fragrance... mountain shots have all the *depth* and grandeur of the original scene.

There's nothing like the REALIST in the whole field of photography. And it is within the reach of modest budgets. From a 36-exposure roll of color film you get 29 pairs of pictures—16 from a 20-exposure roll. Moreover, REALIST users get a higher percentage of "good" shots. So, actually, it costs less than ordinary picture taking.

Ask your dealer to show you some third-dimension Stereo-REALIST pictures... and explain to you what a fine camera the Stereo-REALIST is. For the name of your nearest dealer, write David White Co., 355 West Court Street, Milwaukee 5, Wisconsin.

*Priced according to Fair Trade Practices.  
Camera and Viewer \$182.25 (Tax Inc.)*

**STEREO Realist** 

THE CAMERA THAT SEES THE SAME AS YOU

Mention the National Geographic—It identifies you





New television microphone, developed at RCA Laboratories, virtually vanishes when in active use.

## *Vanishing Microphone lets the stars shine*

Now you see it, now you don't! RCA's new "vanishing microphone" is plainly visible when standing alone—but let a television performer stand before it and it seems to disappear.

Called the "Starmaker," this RCA microphone is little larger than a big fountain pen . . . and principles of modern camouflage design blend it with an artist's clothing. There's no clumsy "mike" to distract your attention

from the artist—and it's also a superbly sensitive instrument.

Through research carried out at RCA Laboratories, the "Starmaker" microphone picks up sound from all directions—hears and transmits every sound the human ear can detect. It's not only small and almost invisible, but it's also one of the most efficient microphones ever devised.

• • •

See the latest wonders of radio, television, and electronics at RCA Exhibition Hall, 36 West 40th Street, N. Y. Admission is free. Radio Corporation of America, RCA Building, Radio City, New York 20, New York.



Known for brilliant pictures, RCA Victor's 1951 home television receivers also have the finest of sound systems—RCA Victor's "Golden Throat."



**RADIO CORPORATION of AMERICA**

*World Leader in Radio — First in Television*

Mention the National Geographic—It identifies you



More sun means more VACATION FUN in El Paso. Come—play outdoors every day—golf, ride, fish—rest, relax under sunny skies; thoroughly enjoy yourself. MORE TO SEE, too! El

Paso's the center for southwestern sightseeing—there are: Carlsbad Caverns, White Sands, mountains, deserts, ranches, oldest missions in U.S.A., scenic and historic wonders, and interesting Juarez just over the Rio Grande. NEW HIGHWAY to MEXICO CITY, all paved,



starts here, opens up the heart of fascinating Mexico. ATTEND COLLEGE at El Paso's Texas Western, co-ed branch of University of Texas. 4-year arts and engineering courses.

\* Official Weather Bureau figures quoted by American Airlines in recent magazine ads show El Paso has most days with sunshine in three winter months, topping every other famous U. S. winter resort on their sunshine map.



**FREE** Learn the advantages of life in the El Paso Sunland.

**EL PASO SUNLAND CLUB** 325 San Francisco St. El Paso, Texas

Please send me FREE El Paso Sunland literature   
 Texas Western College literature   
 Information about new Mexico Highway

Name

Address

City  Zone  State



A new book "INDUSTRY IN ACTION", which tells you all about La Province de Québec: its geography, its historical background, its resources in power, minerals, agriculture, its line communications by rail, road, air, water. Also general statistics, charts and precise data. All is here in this fully illustrated 84 page book.

## LA PROVINCE DE Québec

Write to-day for a complimentary copy to: the Honorable Paul Brault, Minister of Trade and Commerce, Parliament Buildings, Québec City, Canada; or 48 Rockefeller Plaza, New York City 20.

GLACIER NATIONAL PARK in Montana Rockies

See America First

CALIFORNIA including SAN FRANCISCO OAKLAND

All these thrills on one great vacation trip on Great Northern

VANCOUVER and VICTORIA in CANADA

PUGET SOUND including SEATTLE TACOMA



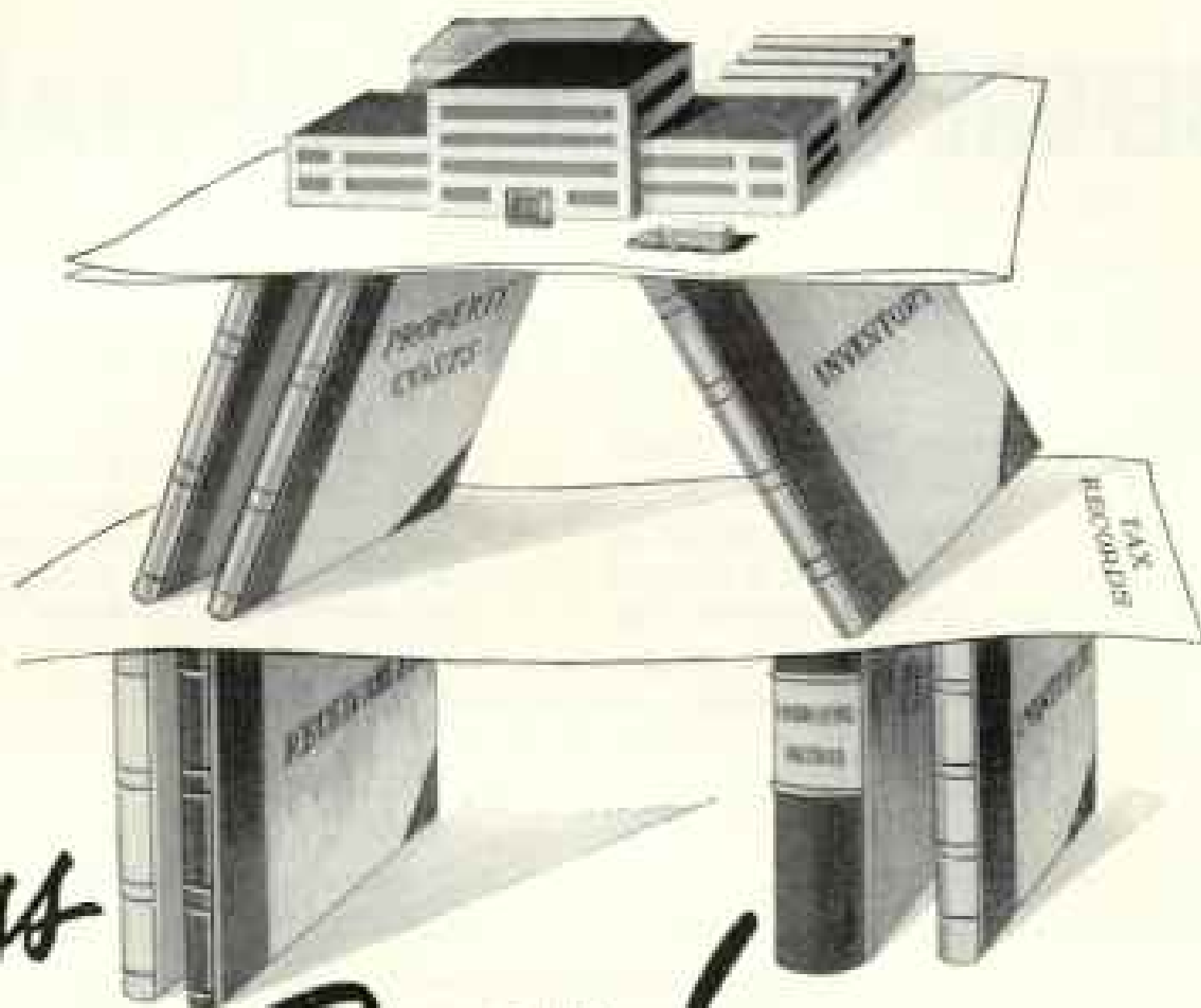
P. G. HOLMES,  
 Pass. Traffic Manager  
 Great Northern Railway  
 St. Paul 1, Minn. Dept. NG 21

I am planning a Western vacation this year. Please send me information on vacation attractions on Great Northern.

Name

Address

City  State



# Your Business is built on Paper!

Don't be one of the 43% who *never reopen* after a fire destroys their vital records!

**ALL MOSLER "A" LABEL SAFES ARE CERTIFIED TO WITHSTAND...**

1. severe fire for 4 hours at temperatures reaching 2000°F.
2. impact due to falling 30 feet after heating, followed by reheating
3. explosion from flash heating

No other safe...only an "A" label safe... will give you this protection.

**EXCLUSIVE FEATURES OF MOSLER "A" LABEL SAFES...**

Thermostatically Controlled, Insulated Valve Door gives added protection by automatically sealing interior against heat penetration.

Scientifically Developed Monolithic Insulation of great balanced structural strength. Efficient Adjustable Interior Filing Units, tailored to your individual requirements.

**Look for this Underwriters' Laboratories Label**



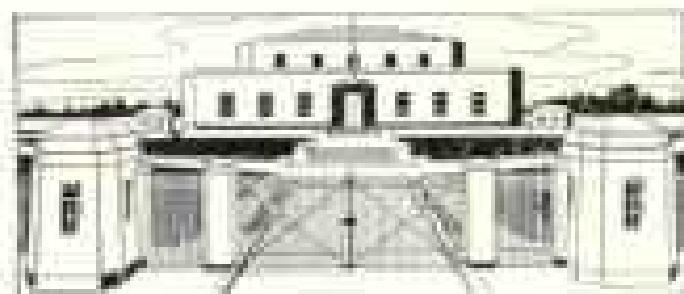
**The Best in Fire Protection!**

Issued by the Underwriters' Laboratories, Inc., the "A" label specifies the minimum protection that all Mosler "A" label safes will provide.

**GET COMPLETE INFORMATION TODAY TOMORROW MAY BE TOO LATE**

## The Mosler Safe Co.

Dealers throughout the country • Factories: Hamilton, Ohio  
Largest Builders of Safes and Vaults in the World



Builders of the U. S. Gold Storage Vaults at Fort Knox, Ky., and also the Bank Vaults that withstood the Atomic Bomb at Hiroshima and preserved their contents.

**FILL OUT AND MAIL TODAY!**

THE MOSLER SAFE CO., Dept. 42  
220 Fifth Ave., New York 1, N. Y.

Please send me:

- The free booklet, "What You Should Know About Safes."  
 The name of my nearest Mosler Dealer.

Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

# BEFORE you leave for BRITAIN...

Secure your transportation and reservations and assure yourself comfortable, carefree travel when you roam the British Isles!

- **RAIL TRANSPORTATION** everywhere, plus reservations on through express trains . . .
- **MOTOR COACH, STEAMER TOURS and CITY SIGHTSEEING TRIPS** . . .
- **CHANNEL STEAMER SERVICES** between Britain and Ireland, Britain and the Continent. Cabin reservations, too.
- **HOTELS**—Reservations made at any of the 47 outstanding hotels strategically situated.
- **MILEAGE COUPONS** save you up to 32% on transportation, and permit you to travel where and when you please. Be sure to purchase Coupons here—not obtainable in the British Isles!

Typical of DEVALUATION Savings—A one day tour through Scotland's scenic wonderland by rail, motor coach and steamer for \$4.10 first class throughout.

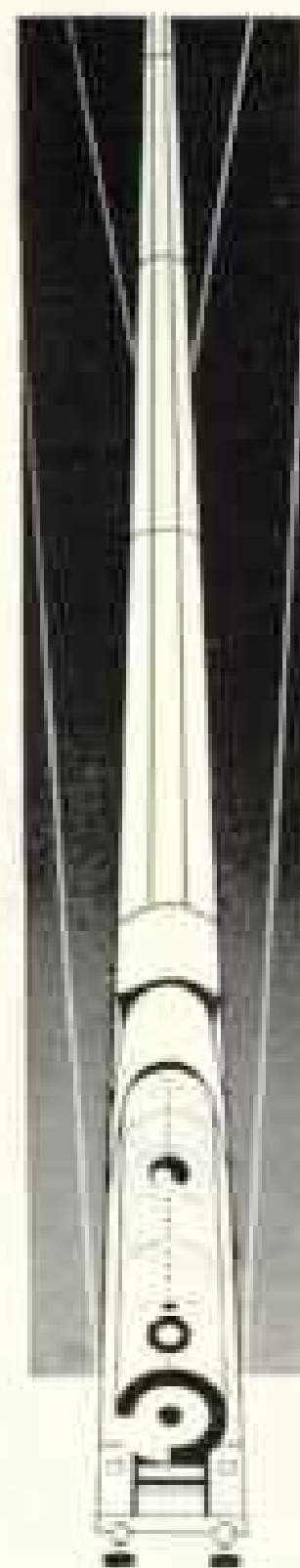
CONSULT YOUR TRAVEL AGENT  
or any office shown below.

- NEW YORK 20, N.Y., 9 Rockefeller Pl.
- LOS ANGELES 14, Cal., 510 W. 6 St.
- CHICAGO 3, Ill., 39 South La Salle St.
- TORONTO, Ont., 69 Yonge St.

For illustrated literature, write Dept. 25 at any address shown above.

1951—FESTIVAL OF BRITAIN YEAR

**BRITISH RAILWAYS**



SOUTH DAKOTA'S

## BLACK HILLS

For adventure and fun in 51

Friendly Hosts Expect You!

Play, swim, golf, ride, or just 'laze around' . . . thrill to western rodeos and pageantry . . . there's recreation that re-creates with friendly hosts to make your stay a memorable adventure for the whole family.

Picturesque Splendor

Variety without end, adventure that thrills, exploration that rewards . . . fun-filled days await you amid scenic beauty. The Needles, majestic Mt. Rushmore, caverns, caves and the nearby Bad Lands are colorful pages of geological history to study and enjoy . . . to record with your camera as you explore this unspoiled wonderland. Plan NOW to come!

Write for Colorful FREE FOLDER 'A'

A. H. Fankow, Pub. Dir.  
**SOUTH DAKOTA**  
STATE HIGHWAY COMMISSION  
PIERRE, SOUTH DAKOTA



Norman Rockwell says:

**"A FASCINATING... MONEY-MAKING art career can be yours"**

We show you our successful methods and art secrets... you learn them at home, in your spare time. Write for our big, handsomely illustrated free booklet that tells how you can have a great new art career! Write today!

**America's 12 Most Famous Artists Show You How!**

Norman Rockwell • Al Parker • Joe Whittomb • Ben Stahl • Steven Dohanos • Robert Fawcett • Peter Helck • Austin Briggs • Harold Van Schmidt • John Atherton • Fred Ludekens • Albert Dorner

**FAMOUS ARTISTS COURSE**

**FREE** Dept. 66-N, Westport, Conn.  
Please send book about your home study art course.

Mr. Mrs. \_\_\_\_\_ Age \_\_\_\_\_  
Miss \_\_\_\_\_  
Street \_\_\_\_\_  
City, Zone, State \_\_\_\_\_

# 25% TO 50% MORE SPACE

General Electric Refrigerators give you much more storage space than most refrigerators now in use . . . yet they occupy no larger floor area!



The G. E. Refrigerator-Food Freezer Combination is the world's finest! Your nearest General Electric dealer will be glad to show it to you. You'll find

him listed in your classified telephone directory under Refrigerators. General Electric Company, Bridgeport 2, Connecticut.

Look!  
A REAL food  
freezer!

Separate frozen-food compartment. Keeps frozen food at zero degree month after month.



Pick ONE  
cube at a time!

Pick out crisp cubes singly. The others will not drop out. It's G.E.'s exclusive Redi-Cube ice tray.



Years and Years  
of DEPENDABLE  
Service!

Of the many millions of G-E Refrigerators made, more than 2,700,000 have been in service ten years or longer.



No more  
defrosting!

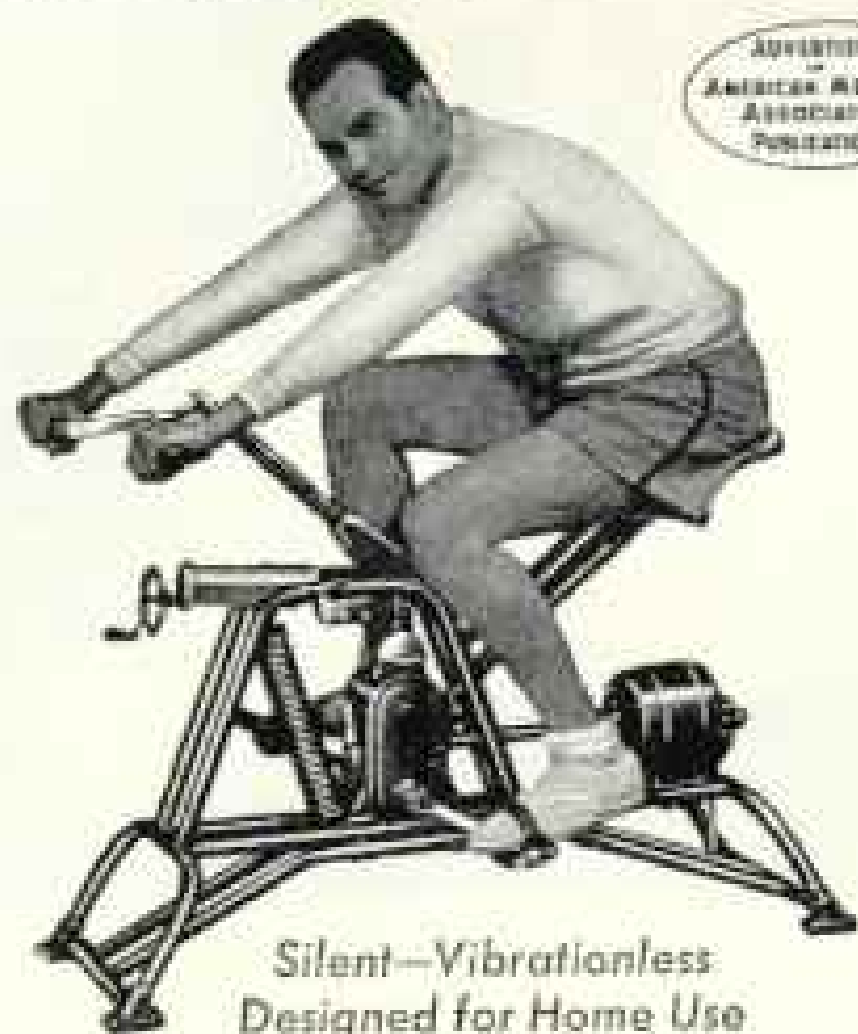
Frost just does not build up in the fresh-food section! Uncovered foods do not dry out! Foods remain crisp and fresh!



GENERAL  ELECTRIC

# ACTION

of the body muscles  
keeps the body fit  
the **EXERCYCLE**<sup>®</sup> way



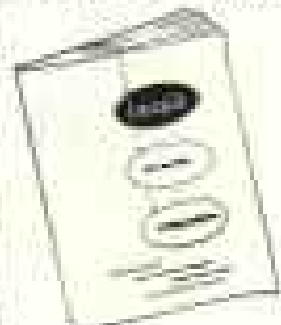
APPROVED  
BY  
AMERICAN MEDICAL  
ASSOCIATION  
PUBLISHED

*Silent—Vibrationless  
Designed for Home Use*

Many doctors use Exercycle—a pleasant way to help control the waistline and strengthen abdominal muscles—helps improve posture and flexibility. This revolutionary exerciser is electrically operated. Just get on . . . turn the switch, and you automatically get the beneficial actions of horseback riding, bicycling, rowing, swimming, separately or in combination, to suit your need or mood, in the privacy and comfort of your own home. Ideal for husband and wife. A few minutes a day is all you need. Send for interesting free booklet.

*Provides type of exercise that favors  
colonic activity and regularity.*

MAIL COUPON FOR FREE BOOKLET



EXERCYCLE CORPORATION  
397 Fifth Avenue  
New York 17, N. Y.

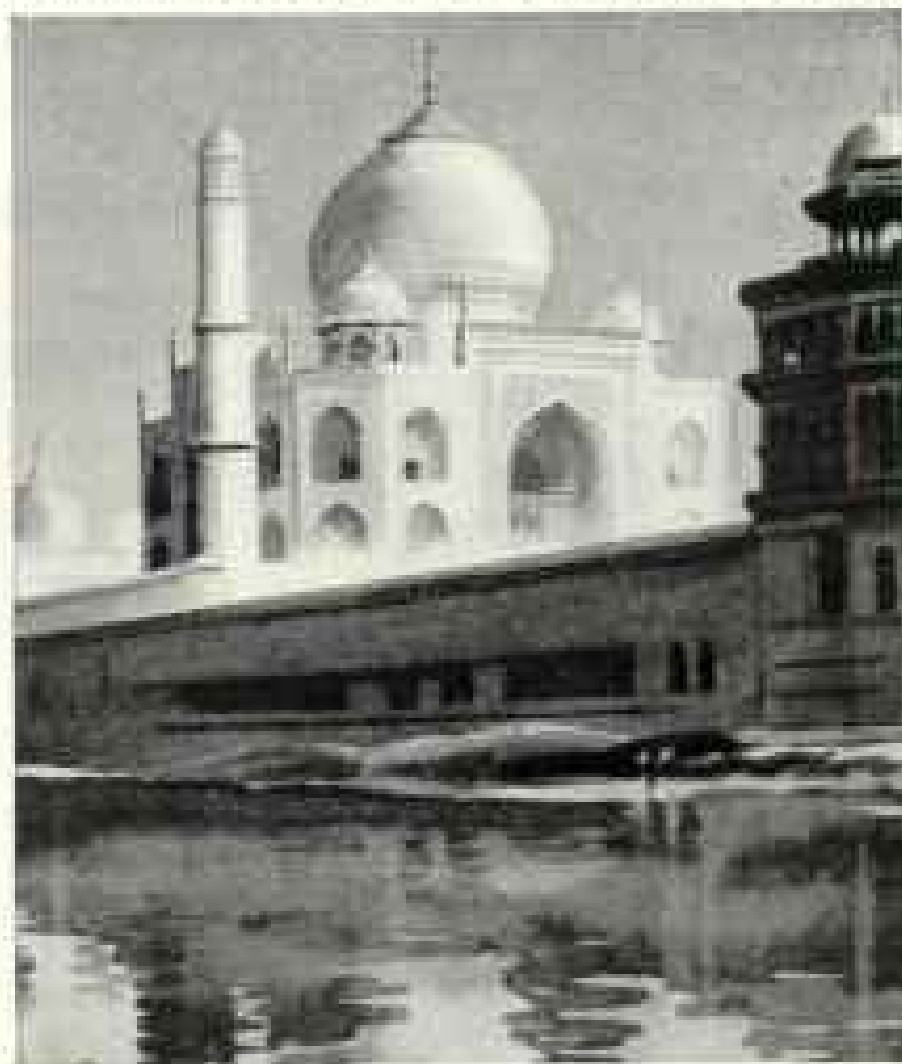
Please send me your illustrated  
brochure (free)

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

*The Taj Mahal,  
grandest tomb on earth . . .*



*The wealth of the Moguls  
can buy no more*

## ENDURING ARTISTRY

The marking for all time of an honored resting place should reflect the ultimate in permanence and artistic feeling. Barre Guild Monuments employ the skills in design and sculpture of the world's leading memorial craftsmen. They have been attracted to Barre, Vermont because here, alone, is found the rare monumental stone known as Select Barre Granite. To have chosen a monument bearing the etched-in Barre Guild seal is to proclaim that one of life's supreme personal duties has been discharged with distinction.

Barre Guild Monuments are available only through carefully chosen dealers, any of whom are worthy of your confidence.

BARRE GUILD, BARRE 6, VERMONT

**FREE BOOKLET**—Write today for illustrated booklet, "Monument Ideas" . . . a valuable aid where guidance is needed.



*"Mark of the Masters"*



# Monuments

# The ABC's of Heart Disease



## A . . . Avoid putting unnecessary burdens on your heart

As a person grows older, the heart ages too. It may become less adaptable to sudden demands and less able to stand long periods of strain. That is why doctors advise those who have reached the middle or later years of life to protect their hearts by following these simple rules:

1. Avoid sudden, violent, or prolonged physical exertion.
2. Keep weight at normal or below.
3. Eat moderately at each meal.
4. Get plenty of rest and sleep.
5. Get prompt treatment for any illness.
6. Avoid fatigue—learn to “take it easy.”
7. Have periodic physical examinations.

## B . . . Be able to recognize the symptoms of heart disease, especially after age 40

When something is wrong with the heart, warning symptoms usually appear—such as pain or a feeling of oppression in the chest, unaccountable shortness of breath, rapid or irregular beating of the heart, and excessive fatigue.

Such symptoms may sometimes be of nervous origin. If they do appear, it is wise to con-

sult the doctor. By acting on these warnings *in time* needless worry may be avoided, and prompt treatment can often be given to help keep the condition under control.

## C . . . Cooperate with your doctor

If the heart is weakened by disease or by the demands of over-strenuous living, its ability to continue working is curtailed. Even an impaired heart, however, has remarkable reserve powers to carry on, provided measures are taken to conserve its strength.

Learning to live with heart disease, however, depends largely on close and continued cooperation with the doctor—in observing faithfully the special rules and requirements which he may impose.

Today, with proper treatment, many people with heart disease may recover completely, or resume a practically normal life.

The Life Insurance Medical Research Fund, in which 146 Life Insurance Companies participate, now supports more than 50 different research programs on heart disease, in the hope that more effective methods of diagnosis, prevention and treatment may be found.

**Metropolitan Life  
Insurance Company**

(A MUTUAL COMPANY)

1 Madison Ave., New York 10, N. Y.



Please send me a copy of your booklet 21N, “Your Heart.”

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_





WITTS March


*It will be a cold, cold world for the loved ones you leave behind—unless you have enough Life insurance.*

**MORAL: INSURE IN** *The Travelers*

**ALL FORMS OF INSURANCE AND SURETY BONDS**

The Travelers Insurance Company, The Travelers Indemnity Company, The Travelers Fire Insurance Company, The Charter Oak Fire Insurance Company, Hartford 15, Connecticut. Serving the insurance public in the United States since 1864 and in Canada since 1865.





You taste its quality

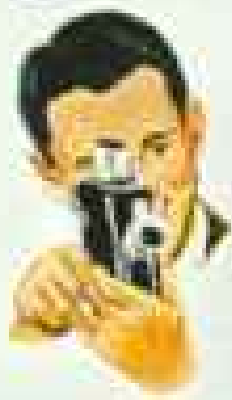
Quality means  
wholesome goodness,  
and Coca-Cola is just that.

Drink  
*Coca-Cola*

ALL U.S. PATENTS

5¢

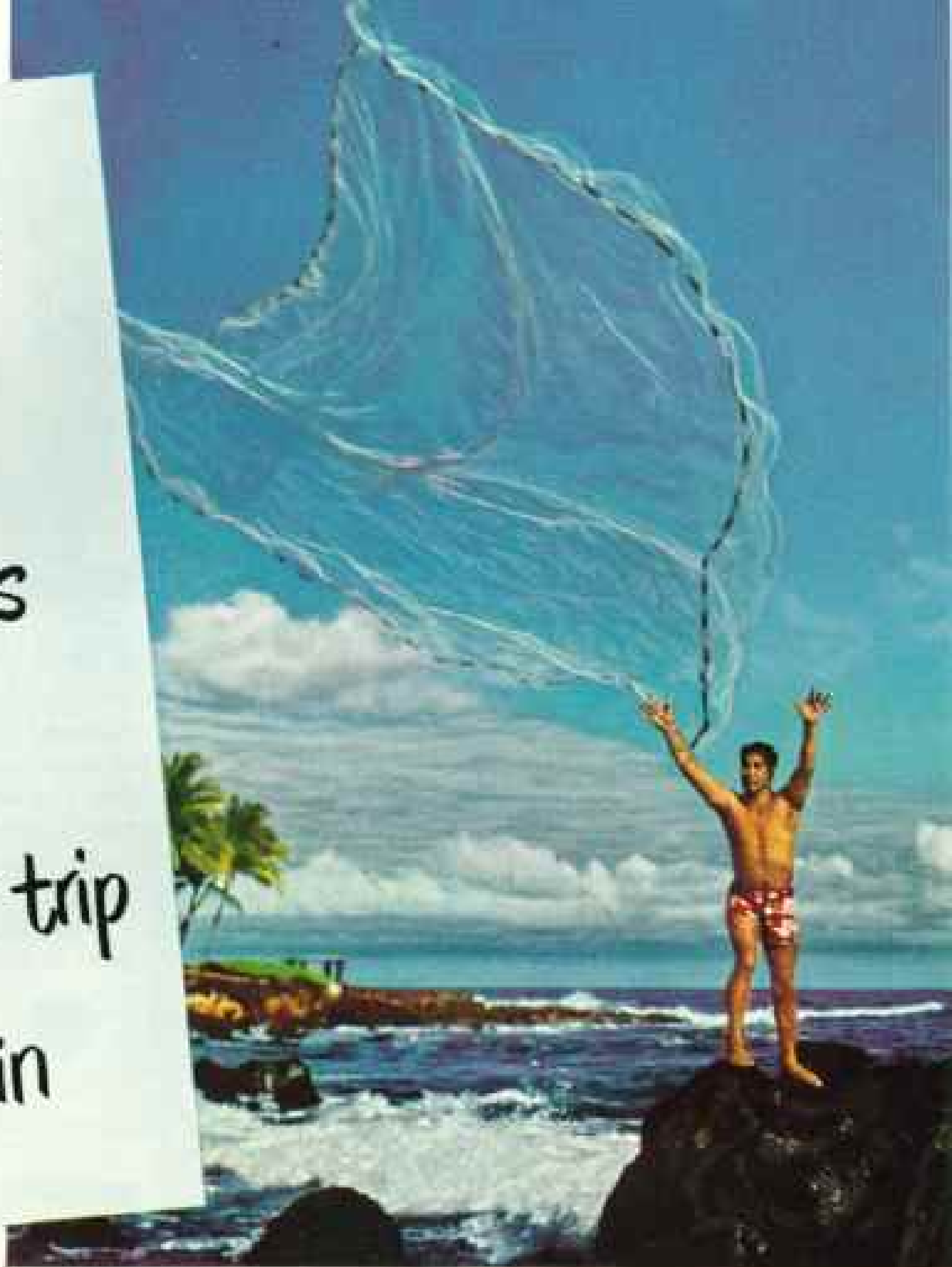
# In color movies



# and color stills



# you'll live your trip all over again



With Kodachrome Film, you can keep the exciting day-by-day action record in movies so gloriously, so colorfully "alive" they almost speak... you can accent all the happy high spots in crisp and gorgeous color stills.

Kodak movie cameras operate simply and surely... start as low as \$84.50 for the new, compact 8mm. "Reliant" with  $f/2.7$  lens. Kodak miniature still cameras make color transparencies as easily as black-and-white snapshots. And Kodak's new "Pony 828" is only \$32.50. See them at your Kodak dealer's.

Eastman Kodak Company, Rochester 4, N. Y.

*Prices on this page include Federal Tax!*



**Cine-Kodak Royal Magazine Camera**—Kodak's newest, finest, 16mm. personal movie camera with 3-second loading and superb  $f/1.9$  "Ektar" Lens, \$192.50.



**Kodak Flash Bantam  $f/4.5$  Camera**—tiny but trim, makes beautiful full-color transparencies on 8-exposure rolls of film. \$57.50.



Show Kodachrome movies, big and beautiful, on your home screen.

Show Kodachrome stills on the same screen or with the amazing Kodaslide Table Viewer...

... or have them made into Kodachrome Prints.



Prices are subject to change without notice. Consult your dealer.

**Kodak**  
TRADE-MARK



*I Discovered How To*

# HEAR AGAIN

**IN 20 SECONDS**

I was in despair when I began to lose my hearing. Then one day—in just 20 seconds—I discovered how to hear again. Thanks to the new Beltone Phantomold—a transparent, almost invisible device—NO BUTTON SHOWS IN MY EAR. Discover how you, too, may hear again. Mail coupon for FREE booklet—tells all the facts.

**Beltone**  
MONO-PAC



One-Unit Hearing Aid  
Beltone Hearing Aid Company, Dept. 2812  
1450 West 19th St., Chicago 8, Ill.

**MAIL THIS COUPON TODAY**

Beltone Hearing Aid Company, Dept. 2812  
1450 West 19th Street, Chicago 8, Ill.  
Please send me in a plain wrapper, without obligation, FREE booklet that tells how deaf can hear again without a button showing in the ear.  
Name.....  
Address.....  
Town.....State.....

EXPERIENCED TRAVELERS ENJOY THE

# Bismarck Hotel

CLOSE TO EVERYTHING IN CHICAGO

OTTO E. STEL, President  
HAROLD F. ROCK, General Manager

## FOR YOUR FAMILY . . .

The lightweight, aluminum canoe of proven safety and durability. For paddling, sailing, rowing or outboard.



**OVER 20,000 SATISFIED OWNERS**

Write for descriptive folders of canoes and 15 ft. Sport Boat.  
Metal Boat Division, Dept. 231



**GRUMMAN**

AIRCRAFT ENGINEERING CORP.  
Bethpage, L. I., N. Y.



## NATIONAL GEOGRAPHIC MAGAZINE Cumulative Index 1899-1950

25,000 references to topical headings, nature subjects, places, maps, authors, titles, and pictures appear in the NATIONAL GEOGRAPHIC MAGAZINE Cumulative Index, 1899-1946, with its accompanying supplement for 1947-1950 (which will be available March 15). With this master key to geographic knowledge you can instantly select and locate material on subjects in which you are interested in 624 numbers of the NATIONAL GEOGRAPHIC published during 52 years. Invaluable in homes, schools, and libraries, The Magazine and Index together make a comprehensive gazetteer and pictorial reference work on world geography. A history of the National Geographic Society and its Magazine by Gilbert Grosvenor, with 80 illustrations, is also included. Blue cloth covers; 950 pages; 7 x 10 inches. \$2.50 in U. S. and elsewhere. (Price of 1947-50 supplement alone, 25¢ in U. S. and Possessions; elsewhere, 50¢.) Postage is prepaid.

OBTAINABLE ONLY FROM  
**NATIONAL GEOGRAPHIC SOCIETY**  
Dept. E-U, Washington 6, D. C.



"Let me take you  
to CALIFORNIA  
via Union Pacific"



*View of MacArthur Park and Wilshire Boulevard*



"When I see motorists speeding along a crowded highway I really feel sorry for them. I like to drive my own car but, brother, not clear across the country! Here I've got an open right of way. My passengers are relaxing in the comfort of a roomy Pullman, Coach or Lounge Car. Maybe they're enjoying one of our top Union Pacific meals.

"So let me take you safely to California. You'll rest as you ride. Incidentally, too, you can rent a car for sight-seeing when you arrive there."

\* \* \*

NOTE: Ask your ticket or travel agent to route you west of Chicago on the Streamliner "City of Los Angeles" or "City of San Francisco", . . . west of St. Louis on the "City of St. Louis." Offer fine trains, too.

*Mail  
Coupon*

— for free illustrated  
booklet on "California  
— via Union Pacific"



Union Pacific Railroad  
Room 402, Omaha 2, Neb.  
Please send free California booklet.

Name \_\_\_\_\_

Street \_\_\_\_\_

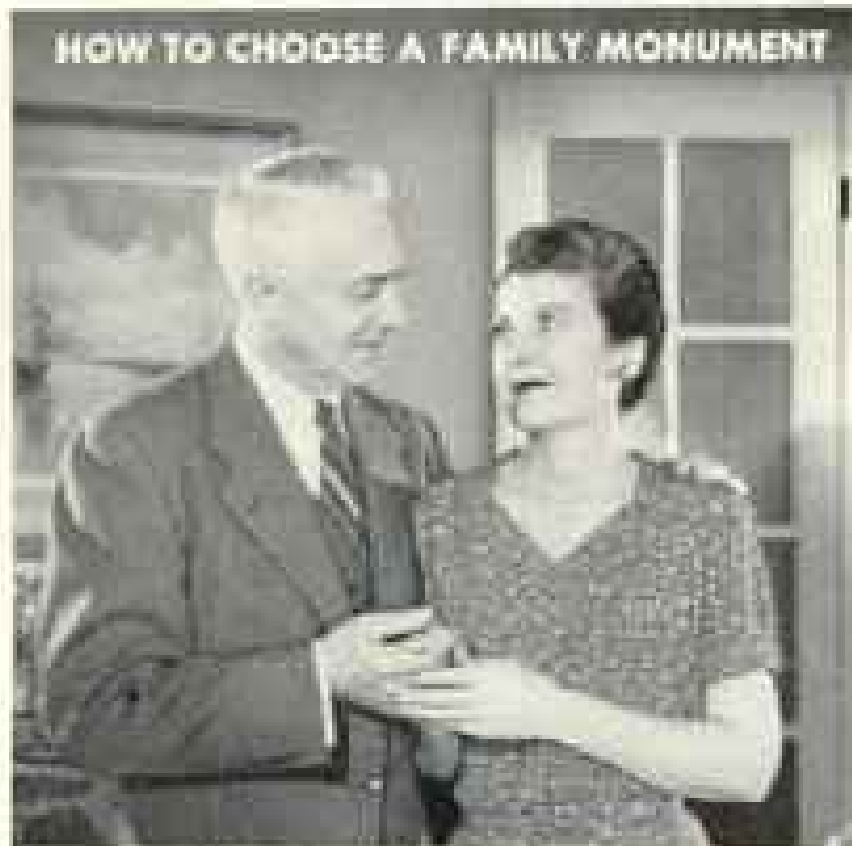
City \_\_\_\_\_ State \_\_\_\_\_

If student, state age and additional material will be enclosed \_\_\_\_\_

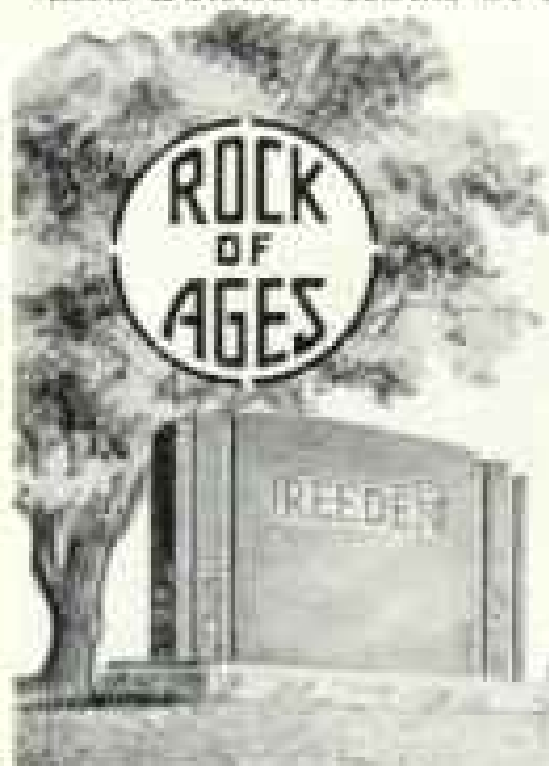
*It reflects the inspiration  
of a life forever beautiful*

When you face the important decision of selecting a family monument . . . ask your Rock of Ages authorized dealer to show you Rock of Ages monuments erected long ago — still brilliant, still beautiful. Rock of Ages blue-grey granite has a hard, close-knit texture which permits its high polish and exquisite sculpturing to remain unchanged throughout years of exposure to the elements.

Every Rock of Ages monument is identified by the famous Rock of Ages seal and backed by a signed and bonded Rock of Ages guarantee.



Many thoughtful people choose their family monument — as well as their cemetery lot — *before the need arises*. Ask your dealer or write Rock of Ages, Barre, Vermont, for "How To Choose a Family Monument" — a large illustrated book available without charge or obligation.



## ROCK of AGES

BARRE GRANITE FAMILY MONUMENTS

*Before you choose, compare—ask your Authorized Dealer to show you proof of permanence in any cemetery.*

**LAVORIS**  
REG. U.S. PAT. OFF.

THE MOUTHWASH and GARGLE  
*for a Clean Mouth and Fresh Pleasant Breath*  
It Tastes Good—It's Good Taste



DETACHES AND REMOVES GERM-HARBORING FILM FROM MOUTH AND THROAT

*Before Business and Social Engagements*

**★ FOR THOSE WHO CANNOT  
OR SHOULD NOT CLIMB STAIRS**



Stair strain is heart strain. Avoid this health hazard — by the push of a button you can ride! A Sedgwick Electric Elevator or Stair-Traveler provides a safe, energy-saving convenience. Readily installed. Endorsed by physicians. Praised by users.



Write for Illustrated Booklet G-3

**Sedgwick** MACHINE WORKS  
259 West 14th St., New York  
**ELEVATORS AND STAIR-TRAVELERS**

**Judd & Detweiler, Inc.**

(Established in 1858)

**Printers**

ECKINGTON PLACE AND FLORIDA AVENUE  
WASHINGTON, D. C.

THIS MAGAZINE IS OUR INDORSEMENT

Mention the National Geographic—It identifies you



*Pictures in 4 sizes  
including color slides*

Add an Adapter Kit to a de luxe "Tourist" and you have a camera that does just about everything. Uses a variety of film for black-and-white or full-color pictures in any of four sizes. Gorgeous Kodachrome slides, too. Priced from \$47.50 to \$95. Adapter Kit, \$14.50. Flashholder with guard, \$11.50. Prices include Federal Tax. Eastman Kodak Company, Rochester 4, N. Y.

*Kodak Tourist  
Camera*

*Prices are subject to change  
without notice—see your dealer*



PLEASE FILL IN BLANK BELOW, DETACH, AND MAIL TO THE SECRETARY

Recommendation for Membership  
IN THE  
NATIONAL GEOGRAPHIC SOCIETY

\* *The Membership Dues, Which Are for the Calendar Year, Include  
Subscription to the National Geographic Magazine*

*To the Secretary, National Geographic Society,  
Sixteenth and M Streets Northwest, Washington 6, D. C.:* \_\_\_\_\_ 1951

*I nominate* \_\_\_\_\_  
PRINT NAME OF NOMINEE

*Occupation* \_\_\_\_\_  
(This information is important for the records)

*Address* \_\_\_\_\_  
PRINT ADDRESS OF NOMINEE

\_\_\_\_\_ *for membership in The Society.*

*Name of nominating member:* \_\_\_\_\_  
PLEASE PRINT

*Address* \_\_\_\_\_

\* DUES: Annual membership in United States, \$4.00; Canada, \$5.00; abroad, \$5.00. Life Membership—\$100.00 U. S. funds. Remittances should be payable to National Geographic Society. Remittances from outside of continental United States and Canada should be made by New York draft or international money order.



## Career girl, 1965

*Little Miss Telephone herself. Thirty-five members of her family have worked for the telephone company.*

That's Karen Terry — She's just three and cute as a button. Already she's decided to be a telephone operator when she grows up.

There are many reasons for her choice. For Karen is related to an interesting telephone family in California. Thirty-five members of this family have worked for the telephone company in the past sixty-five years.

**Lots to Talk About** — When Karen's Aunt Ella was asked what the dinner conversation is like when they get together, she said — "Why we talk shop, of course. All about the telephone company and our friends there."

It's that way with thousands of other families throughout the country. One Bell Telephone Company found that 2800, or ten

per cent, of its employees had members of their families in telephone work.

**Stepping Ahead** — A young man doesn't follow his Dad in a job unless Dad says, "Come along, son — you'll find it as good a place as I did." You won't find sister following sister, and brother following brother into telephone work without reason. They like the work and the company.

Good people in good jobs help to give this country the best telephone service in the world at low cost.

**BELL TELEPHONE SYSTEM**





Follow world travellers to

# Jasper

a Maple Leaf Vacation

SHOWPLACE  
OF THE  
CANADIAN  
ROCKIES



Famous people return again and again to celebrated, informal Jasper Park Lodge . . . to its great golf course, to its mountain and glacier grandeur, its swimming and fishing. Accommodation 650 guests. Season opens June 11. Rates from \$12.00, including meals.



Ride horseback through matchless scenery for hours or days over marvellous trails. Motor, hike and climb, camera-shoot beauty spots and protected wild life. Fish for Rainbow, Dolly Varden and Eastern Brook Trout. Whatever your pleasure, Jasper doubles it!



Find out about Canada's  
10 Top Maple Leaf Vacations at your  
nearest Canadian National Office\*

1. Across Canada.
2. Alaska Cruise.
3. British Columbia.
4. Eastern Cities and Laurentians.
5. Hudson Bay and Winnipeg.
6. Jasper in Canadian Rockies.
7. Muskoka (Lake of the Woods).
8. Ontario Highlands.
9. Provinces by the Sea.
10. Romantic French Canada (Quebec and the Saguenay).

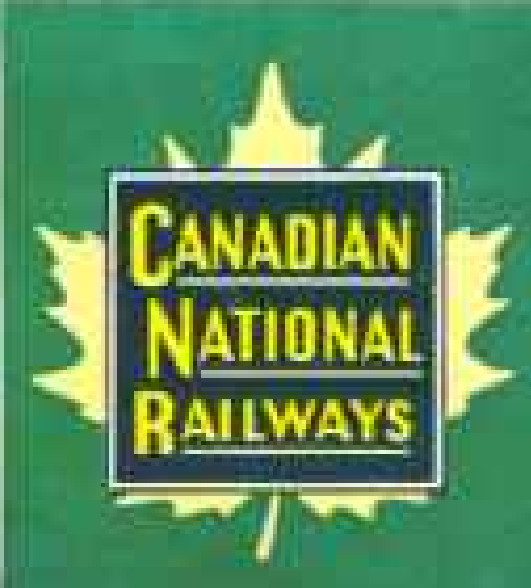
Make your selection now. Let us help you plan your vacation in Canada. Canadian National's MAPLE LEAF TOURS (non-escorted) outline routes, days, dollars, and can be tailored to meet your needs. Visit or write your Canadian National office listed below.\*

*Jasper...one of Canada's 10 top vacations*

Come to Jasper's year-round playgrounds for a best-ever vacation. Every season has a magic of its own amid the mountains and lakes of Jasper National Park—largest national park in America. You'll want to visit Maligne Lake, called by world travellers the most beautiful anywhere; see the spectacular Columbia Icefield. Enjoy gracious hospitality on Canadian National's *Continental Limited*, travelling the "Scenic Route" across Canada.



Maligne Lake...Grand  
Scenery...Grand Fishing



\*Canadian National offices in Boston, Buffalo, Chicago, Cincinnati, Detroit, Duluth, Flint, Mich., Kansas City, Los Angeles, Milwaukee, Minneapolis, New York, Philadelphia, Pittsburgh, Portland, Me., San Francisco, Seattle, St. Louis, Washington, D.C. Offices also in Montreal, Canada; Sydney, Australia; and Wellington, New Zealand.